

A COMPARATIVE STUDY OF YAJURVEDIC SIKSAS

A thesis Submitted to the Utkal University
for the Degree of Doctor of Philosophy
in Sanskrit

by

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या ते धामा॑नि पर॒माणि॑ याऽव॒मा
या म॑ध्य॒मा वि॑श्वकर्मन्नुतेमा
शि॒क्षा सखि॑भ्यो ह॒विषि॑ स्वधावः
स्व॒यं यज॑स्व त॒न्वं वृ॑ध॒नः

शुक्लयजुर्वेदः (१७/२१)

yā te dhāmāni paramāṇi yā'vamā
yā madhyamā viśvakarmannutemā /
śikṣā sakhibhyo haviṣi svadhāvaḥ
svayaṁ yajasva tanvaṁ vṛdhānaḥ / /
(Śukla-yajurvedaḥ, XVII-21)

अथ शिक्षां प्रवक्ष्यामि ह्यमोघानन्दकारिणीम् ।
यस्याः श्रवणमात्रेण सर्वत्र विजयी भवेत् ॥

(अमोघानन्दिनीशिक्षा-१)

atha śikṣāṁ pravakṣyāmi hyamoghānandakāriṇīm /
yasyāḥ śravaṇamātreṇa sarvatra vijayī bhavet ॥
(Amoghānandinīśikṣā-1)

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Certificate

Certified that the thesis entitled "**A Comparative Study of Yajurvedic Śikṣās**" submitted for the award of Degree of Doctor of Philosophy in Humanities (Sanskrit) to the Utkal University, Bhubaneswar embodies the result of the bonafide research work carried out by Mrs. Manaswini Sarangi (Panda), L.L.B, Advocate (Income Tax) under my guidance and supervision. It is also certified that the title of the thesis is within the area of research. No part of this thesis has been submitted for any other Degree or Diploma. The thesis has fulfilled the standard as per the regulation of Utkal University.

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Declaration

I do hereby, declare that this thesis entitled - "**A Comparative Study of *Yajurvedic Śikṣās***" submitted for the fulfillment of Ph.D. examination in Sanskrit, under the guidance of Dr. (Mrs.) P.M. Rath, Reader, P.G. Dept. of Sanskrit, Utkal University, Vani Vihar, has not been submitted before or published elsewhere for any degree or diploma. Any help or source of information which has been availed in this connection is duly acknowledged.

Manaswini Sarangi 8.8.2005

Manaswini Sarangi

Preface

Often a small idea precedes a great achievement and a wild dream lays the foundation of a dazzling reality. The same idea holds true for me too. After my marriage, perhaps in the year 1990, it all started moreover a decade back, while I was having an informal talk with my father “Shri Rangadhar Sarangi (Retd. Reader in Sanskrit) when he told about his academic interest in the field of vedic lore. He suggested me this topic “**A Comparative Study on the Yajurvedic Śikṣā**”. Though it was very difficult and a tough job for accepting this topic for my research, still I accepted it without any hesitation. So the journey started with an informal chatting with my father and had to end in serious academic pursuit in the libraries and study rooms.

To begin with, my father suggested the name of Dr. K.C. Acharya (Professor of Sanskrit) to be my guide. As a renowned scholar, I approached him to grace me by accepting my request. He gave me priceless advice about how to proceed and how to make things comfortable. He recommended many books for my reference and I was doing well under his active guidance. At that moment, I had to drop the idea of staying in Bhubaneswar because my husband got transferred to New Delhi. Initially I got depressed, by his sudden transfer, but gradually it acted as a blessing in disguise as I availed the opportunity of accessing the library of Delhi University. I also interacted with some of the professors there and made ample progress in my work. But another change of place was really shocking, when my husband got again transferred to Satara, a city near Pune. I was slightly upset but this proximity to Pune also helped me a lot as I collected some important books of different authors like Yugal Kishore

Vyas, Amarnath Sastri, Shri Pattabhiram Sastri, Siddhesvara Verma and renowned scholars like Macdonell, Max-Muller and Winternitz. Thus I moved towards my goal slowly and steadily. But all of a sudden, disaster struck me when I heard the untimely demise of my guide Professor K.C. Acharya. It was a massive blow to my efforts and I almost gave up the hope of finishing my work. For a considerable period everything was in cold storage and I had more or less accepted the failure with a smile.

But destiny had better things in store for me. Oneday I got caught with the idea of requesting Mrs. Prativa Manjari Rath, presently Reader in Sanskrit, Utkal University. She rekindled interest in me to take up the unfinished task under her supervision. Her active guidance and inspirational approach was instrumental in the eventual completion of my research work. Ultimately I must admit that unless something is preordained it never happens. So definitely, I had “His blessing” all through and it was probably “His desire” that someday I would succeed in my effort.

Due to my guide’s untiring efforts and sincere co-operation. I managed to arrange each and every chapter systematically. The introductory portion describes about the significance, the plan and presentation of the study of the *Śikṣā*.

Chapter one describes about the definition, chronology, versification and complexity of *Śikṣās*.

Chapter two mainly gives stress on content analysis of *Śikṣās* belonging to the *R̥k*, *Sāma* & *Atharva* vedas, along with the general *Śikṣās*.

Chapter three deals with the survey of *Kṛṣṇa Yajurvedic* & *Śukla Yajurvedic Śikṣās*.

Chapter four describes comparative analysis of *Śukla Yajurvedic Śikṣās*, their similarities & dissimilarities, and the peculiarities of *Yajurvedic Śikṣās*.

Chapter five discusses about *raṅga-nāda-nāsikya* and *yama* letters in *Yajurvedic Śikṣās* followed by the summary of findings.

This thesis is an instrument for every vedic student as it has spared more stress on pronouncing vedic words with utmost accuracy. I shall consider my labour rewarded if this work goes ahead arousing interest in the minds of the scholars engaged in *svādhyāya* as well as in vedic research. This thesis which is now being submitted to the Utkal University for the Degree of Doctor of Philosophy will be proved fruitful if it is appreciated by the learned critics and scholars.

Manaswini Sarangi 8.8.2005
Smt. Manaswini Sarangi

Acknowledgement

This thesis is an attempt to study the *Yajurvedic Śikṣās* with special reference to *Śukla Yajurveda* and to stress upon their peculiarities on pronouncing the vedic words with utmost accuracy. It is my pious duty to acknowledge the help received from various scholars, sources and persons.

I express my most sincere gratitude to my Revered Guide Dr. (Mrs.) Prativa Manjari Rath, (Reader) P.G. Department of Sanskrit, Utkal University, Vanivihar, under whose guidance and thorough supervision this thesis has been prepared. In spite of many other preoccupations, she has spared her time for me to prepare this thesis along with suggestions, modifications and corrections. Indeed she was kind enough to anchore my ship, which was in troubled waters, helped it to be steady and steered it to the source safe and successful.

I owe a great deal to all my teachers at Utkal University (Vanivihar) namely Prof. P.K Mishra, Prof. G.K.Dash, Prof. R.N.Panda, Dr. R.M.Dash, Dr. (Pt.) D.Tripathy who provided serious academic counselling and took active interest in my research. To begin with Prof. K.C. Acharya played a vital role in supervising the thesis at the beginning. I shall always remain grateful to him. At this stage I pray for the blessing of the departed soul. I also thank Dr. R.V. Joshi, the then Professor of Delhi University, who helped me a lot at the intial period.

Apart from my own efforts, I am indebted to many persons who have contributed directly or indirectly towards making this dream come true.

While my father Sri Rangadhara Sarangi (Reader in Sanskrit)

remained the initial source of inspiration, my interest and enthusiasm was sustained and nurtured by all my near and dear ones. I owe my deep sense of gratitude to my father Sri Rangadhara Sarangi for not only initiating me in the sanskrit studies but also for helping me a lot in my research work.

I am really indebted to my mother Mrs. Kiranbala Sarangi and all my three brothers and sister for giving me emotional support. I am deeply obliged to my father-in-law (late) Mr. F.C. Panda and Radharani Panda for sharing my problems regarding the matter of research. Both my kids Gitun and Situn helped me a lot. I am grateful to Baman Charan Parida Professor in library science, Mr. B. Swain and Mrs. P. Swain for helping me a lot in the renewal of my work.

However a special word of thanks to my husband Mr. Udaya Sankar Panda (G.M) Telecom who has always been there when it mattered. He has always been a very supportive and encouraging counsellor for me from the beginning to end.

I am alone responsible for the mistakes, shortcomings and limitations that might have been there in this thesis for which I crave the indulgence of the learned scholar.

Last but not the least, I express my thanks to Sri Manoj Kumar Samantara for having efficiently processed this thesis through computer.

Date: 8.8.2005

Manaswini Sarangi
Smt. Manaswini Sarangi

Abbreviations

<i>Amogh. Śik.</i>	:	<i>Amoghānandinī Śikṣā</i>
<i>AV.</i>	:	<i>Atharvaveda</i>
<i>Ind. Stu.</i>	:	<i>Indische Studien</i>
<i>J.R.A.S.</i>	:	<i>Journal of Royal Asiatic Society</i>
<i>KYV</i>	:	<i>Kṛṣṇayajurveda</i>
<i>Laghu Madh. Śik.</i>	:	<i>Laghu Mādhyandina Śikṣā</i>
<i>Lom. Śik.</i>	:	<i>Lomaśī Śikṣā</i>
<i>Māṇḍ. Śik.</i>	:	<i>Māṇḍavī Śikṣā</i>
<i>M.I.L.</i>	:	<i>Modern Indian Language.</i>
<i>M.W.D.</i>	:	<i>Monier William's Dictionary</i>
<i>MSS.</i>	:	<i>Manuscripts</i>
<i>Mādh. Śik.</i>	:	<i>Mādhyandinī Śikṣā</i>
<i>Nār. Śik.</i>	:	<i>Nāradya Śikṣā</i>
<i>Pān. Śik.</i>	:	<i>Pāṇinīya Śikṣā</i>
<i>Pān. Ś.S.</i>	:	<i>Pāṇinīya Śikṣā Sūtra</i>
<i>Pāri Śik.</i>	:	<i>Pāri Śikṣā</i>
<i>Prā. Prad. Śik.</i>	:	<i>Prātiśākhya Pradīpa Śikṣā</i>
<i>Pārā. Śik.</i>	:	<i>Pārāśarī Śikṣā</i>
<i>Rk. Prāt.</i>	:	<i>Rkprātiśākhya</i>
<i>Rk. Tr.</i>	:	<i>Rk Tantra</i>
<i>RV.</i>	:	<i>Rgveda</i>
<i>Śik.</i>	:	<i>Śikṣā</i>

<i>ŚYV.</i>	:	<i>Śukla Yajurveda</i>
<i>ŚS.</i>	:	<i>Śikṣā Saṅgrahaḥ</i>
<i>Śat. Brā.</i>	:	<i>Śatapatha Brāhmaṇa</i>
<i>Śl.</i>	:	<i>Śloka</i>
<i>Śoḍaṣa. Śik.</i>	:	<i>Śoḍaśaślokī Śikṣā</i>
<i>Sva. La. Pa. Śik.</i>	:	<i>Svarabhakti Lakṣaṇa Pariśiṣṭa Śikṣā</i>
<i>Taitt. Prā.</i>	:	<i>Taittirīya Prātiśākhya.</i>
<i>Tai. Sam.</i>	:	<i>Taittirīya Saṁhita</i>
<i>Va. Pra. Śik.</i>	:	<i>Varṇaratnapradīpikāśikṣā</i>
<i>Vāj. Prā.</i>	:	<i>Vājasaneyīprātiśākhya.</i>
<i>VSM.</i>	:	<i>Vājasaneyī-saṁhita-mādhyandina</i>
<i>Yāj. Śik.</i>	:	<i>Yājñavalkya śikṣā</i>
<i>YV.</i>	:	<i>Yajurveda</i>
<i>Vāś. Śik.</i>	:	<i>Vāśiṣṭhī śikṣā</i>
<i>Vyā. Śik.</i>	:	<i>Vyāsa śikṣā</i>

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INTRODUCTION



INTRODUCTION

0.0 Śikṣās : as a class of literature

Śikṣās belong to a class of Vedic texts known as *vedāṅga* literally which means limb or auxilliary part of the Veda. These are essential for correct interpretation of the vedas. As per the popular verse of the *Pāṇinīya śikṣā*, the *śikṣā* forms the nose of the *vedapuruṣa* or veda incarnate:-

chandaḥ pādau tu vedasya hastau kalpo 'tha paṭhyate /
jyotiṣāmayanaṁ cakṣurniruktaṁ śrotramucyate //41
śikṣā ghrāṇaṁ tu vedasya mukhaṁ vyākaraṇaṁ smṛtam /
tasmāt sāṅgamadhītyaiva brahmaloke mahīyate //42

The real study of language started in the *vedāṅga* period. Of the six *vedāṅgas*, four are related with the study of nature of *vāk* i.e, speech and these four are- *śikṣā*, *nirukta*, *vyākaraṇa* and *chandas*. In the *śikṣā* literature the analysis of phonetics of alphabet, in the *Nirukta*, the analysis of word meaning, in the *vyākaraṇa* the syntactical analysis of the sentences and in the *chandas* the analysis of moras and accents are specifically dealt with. The subject matter of *śikṣās* as described in the *Taittirīya Āraṇyaka* is *varṇa* or alphabet such as *a*, *ā*, *i*, *ī* etc., *svara* or accent such as *udātta* etc, *mātrā* or quantity such as *hrasva*, *dīrgha*, *pluta*, etc., *bala* or the place of articulation and the articulatory process of sounds, *sāma* or tempo of pronunciation and *santāna* which refers to the sound junction. On the whole, the *śikṣās* deal with phonetics of the Vedas with minutest details. There are a number of authors of the *śikṣās* composed at different times. Most of them are less related to a particular veda,

since the rules framed by them indiscriminately apply to all the Vedas. Among the general Śikṣās belonging to all the Vedas the foremost are *Āpiśālīya śikṣā sūtra*, *Pāṇinīya śikṣā sūtra*, *Kauṇḍinnyāyana śikṣā sūtra* etc. Yet there are some which belong to and are concerned with the phonetics of a particular *veda*. For instance *Śaiśirīya śikṣā* and *Śaunaka śikṣā* belong to *RV*, *Yājñavalkya śikṣā*, *Varṇaratnapradīpikā śikṣā*, *Prātiśākhya-pradīpa śikṣā* etc. belong to *ŚYV*, *Cārāyaṇīya śikṣā*, *Bhāradvāja śikṣā*, *Vyāsaśikṣā*, *Kauhelīya śikṣā*, *Sarvasammataśikṣā*, *Pāriśikṣā*, *Kaṇḍīya śikṣā* etc. belong to *KYV*. *Lomaśī śikṣā*. *Gautamī śikṣā*, *Nārādīya śikṣā* etc. belong to the *SV* and *Māṇḍukya śikṣā*, *Varṇapaṭala śikṣā* etc. belong to the *AV*. Many of these śikṣā texts are mere catalogues of certain sounds of the Vedas and contain very little matter of general vedic linguistics and certainly they were prepared to insure accuracy in vedic pronunciation, to retain the vedic texts intact and to facilitate vedic research work. Among the above śikṣā texts the maximum number belongs to *ŚYV*.

0.1. Need for the study

Now-a-days when meaning analysis and context analysis of vedic texts have gained importance in India and abroad in the field of vedic studies than the traditional chanting of the Vedas, then the question comes to one's mind whether the vedic student or researcher possesses requisite prior knowledge or equipped with the phonetic training which is a desideratum for not only correct chanting of *mantras* but also for correct analysis of the meaning. The vedic study of the present century is becoming more popular and many international and national conferences are being organised in India as well as abroad on vedic interpretations and themes. The modern researcher's interpretations are based on commentaries of

Sāyaṇācārya, of Ācārya Skandaswāmin, Swami Dayānanda Sarasvati, Sri Aurovindo, English Translations by H. H. Wilson, R.T.H. Griffith, Louis Renou, Oldenberg, Macdonell, Bohtlingk and Roth and so on and so forth. Of course this is a positive progress in the history of vedic interpretation, which was not so flourishing before the 19th century A.D. Prior to the 19th century, in the ancient days vedic studies were concentrated mostly to the learning of vedic mantras by heart only through traditional system of learning. Intelligent and hardworking students used to learn by heart the *saṁhitā* texts along with the *Brāhmaṇa* and *vedāṅga* texts as well as the *vikṛti pāṭhas*. This tradition was really amazing though difficult. But now-a-days a student is initiated in the vedic studies without going deep into the *vedāṅga* texts, specially the *Śikṣā*, which is the most important *vedāṅga* for reciting the *mantras* and analyzing the meanings. As declared in *Pāṇ. śik.*

"*mantro hīnaḥ svarato varṇto vā*

mithyāprayukto na tamarthamāha /

sa vāgvajro yajamānāṁ hinasti

yathendraśatruḥ svarato ' parādhāt //"

(*Pāṇ. śik.*, verse-52)

YV has been divided into two main branches i.e, *śukla* and *kṛṣṇa* and they were further divided into fifteen and eighty six *śakhās* respectively. Out of the fifteen *śakhās* of *ŚYV* only two *Kāṇva* and *Mādhyandina śakhās* are now available. The Brahmins inhabiting now in Orissa belong to the various *śakhās* or branches of the four vedas, the majority of whom belong to the *Kāṇva śakhā* of *ŚYV*. It is ascertained by the vedic scholars that the *Kāṇvas* in the beginning were living in North-West region of India but later on migrated to the east and settled down

on the banks of the rivers Gomatī, Saraju, Narmadā, Kṛṣṇā, Godāvarī in "Karnataka" to which the territories of ancient Orissa were extended in early historic period. The vedic education is flourished in Orissa till today, the foundation of which was laid on a strong footing during the Somavarṁśī period. Evidences of vedic sacrifices were to be found during the Sailodbhavas which might be necessitating vedic studies and practice of *Karmakāṇḍa* at the initial stage, but made a philosophical and interpretative study in the later period, finding it's maturity during the Somavarṁśī rule.

Though the Bhaumakaras were patronising the Buddhist religion yet they could not ignore the importance of the Brahmin teachers indulging in vedic study and remaining at the land of Brahmin villages. Necessary examples are provided by several copper plate grants of the *Bhanjas*, *Dhavalas* and *Kādambas*. The *kādambas* were flourishing along with the Ganga Monarch, who ruled immediately after the Soma dynasty and had patronised vedic education in various ways. Thus the vedic education is flourishing in Orissa specially relating to *YV* since long time. So it is highly imperative to have a sound knowledge of the phonetic specialities relating to the *YV*. The analysis of *Yajurvedic Śikṣās* specially of *śukla Yajurvedic Śikṣās* will certainly throw much light on the peculiarities of the *mantras* of *YV* and specially of the *ŚYV*, **as stress is laid upon in this work on the analysis of *śukla yajurvedic śikṣās* alongwith the other *Śikṣās*.**

0.2. Significance of the study

At the outset the question which comes to the mind in the context of vedic studies is- that, is it sufficient to understand and grasp the meaning of *YV* by going through the commentaries and translations or by traditional

way of vedic chantings? The grammar, the vocabulary and the process of recitation of vedic texts have their own pristine purity and uniqueness conducive to the proper understanding of the Vedas. For a clear knowledge of vedic language, the ancient seers very conscientiously and rigorously planned to preserve, guard and protect the Vedas by devising the *śikṣā* literature which are like inaccessible mighty high walls erected around the forts of vedic wisdom. Among the six *vedāṅgas*, *śikṣā* occupies one of the most prominent positions to handle and take care of the word and meaning context of the vedic *mantras*. Along with the phonetic analysis of vedic *mantras*, the *ācāryas* of *Śikṣā* have framed the directives for the learning of vedas which are effectively contributive not only to mastering the vedic texts but also to have a sound knowledge in the field of vedic literature. In the *Śikṣās*, the most significant point which has been emphasised is that of proper, accurate, accented pronunciation of the vedic hymns.

Thus *Vyāsa Śikṣā* states:

suvyaktasvaro dhairyam taccittatvam caturguṇaḥ /
etadyuktaḥ paṭhedvedaṁ sa vedaphalamaśnute // verse 503

suvyaktaṁ or the recitation of *mantras* according to phonetic rules, *susvara* refers to pronouncing vedic hymns in a good voice with all the accents of pronunciation, *dhairyam* means undivided attention and concentration and *taccittatvam* refers to one's completely being absorbed in vedic recitation. These are essential qualities for vedic studies and the *ācārya* must very carefully watch over the possessiveness of all these four in adequate proportion in the vedic student. The *Pārā. Śik.* of *ŚYV* offers the horrors of a hell named *kumbhipāka* for those who mispronounce the vedic *mantras*.

*aśuddhapaṭhanāccaiva naiva mokṣaṁ prapedire /
tasmātsarvaprayatnena śuddhapāṭhī bhaveddvijaḥ /
anyathā nirayaṁ yāti kumbhīpākaṁ ca dāruṇam // 3*

For accomplishing right pronunciation several indigeneous tips are also enjoined as brushing the teeth by the sticks of specific trees which makes the teeth strong and also prepares the mouth cavity with their herbal sap far more effective for right pronunciation.¹ Not only this but also recipes are prescribed for increase of memory and intellect.² The physical and mental dispositions of the student are also directed for vedic recitation. *Vāj. Śik.* states that the vedic student must be of a pleasant mood, firm mind and self-restraint personality. A stable physical and psychological state is necessary for vedic studies.³

Thus without proper command on the texts, vedic studies including both the recitation and interpretation are but insufficient. The plans and directives of learning of veda as found in *Śikṣā* texts impresses upon the pupil, the real essence and grand majesty of vedic chanting which is very significant for learning the Vedas.

0.3 Plan and presentation of the study

The present study consists of five chapters as follows besides the Introduction and Conclusion. The Introduction purports to outline the following points such as need for the study, significance of the study, source materials, and deals with methodology adopted, scope of the study, scheme of presentation and limitations of the study.

1. *yajñavalkya śikṣā*, verses 34 & 35

2. *triphalāṁ lavaṇāktena bhakṣayecchiṣyakaḥ sadā /
kṣīṇamedhā jananyeṣā svaravarṇakarī tathā //*

3. *Vājasaneyī śikṣā*, verses 20-21, 25

First chapter deals with meaning & significance of *Śikṣā* as a class of vedic literature, concept of *Śikṣā* literature, collections of *Śikṣā* texts, chronology of *Śikṣā* texts, *Śikṣā* as compared with the *prātiśākhya*s enumeration of *Śikṣās* in general and *Śikṣās* belonging to various Vedas specially listing the *Śikṣās* of *ŚYV*.

Second chapter is a survey of the *Śikṣās* belonging to various vedas as of *RV*, *SV* and *AV*.

Third chapter deals with the survey of *Śikṣās* of *YV* in general. This chapter is divided into two parts and part one is devoted to the *Śikṣās* of *KYV* and part two belongs to *Śikṣās* of *ŚYV*.

Fourth chapter is a comparative analysis of *ŚYV* where an attempt has been made to present a comparative analysis of *Śikṣās* belonging to *ŚYV*. This analysis has been done on the basis of points of similarities in *ŚYV Śikṣās*, points of differences and thirdly some specific peculiarities of injunctions or rules found in the *Śikṣās* of *ŚYV*.

Fifth chapter describes about the importance of *raṅga*, *nāda*, *nāsikya*, *yama* in *ŚYV*. The vowel length of *raṅga*, difference between *raṅga* and *anusvāra*, varieties of *raṅga*, oral gestures in the pronunciation of *raṅga* etc. have been dealt with in the first section of this chapter. Definition of *nāda* and *nāsikya varṇas*, and difference between *nāda* and *nāsikya* are some of the significant points in the second section and in the third section the concept of *yama* letters and their process of pronunciation etc. have been dealt with.

The concluding part presents a report on the necessity of *ŚYV Śikṣās* for the correct chanting of *ŚYV* and for the purpose of research more efficiently with a humble suggestion that the *Śikṣā* texts should be

introduced in the syllabus of modern Sanskrit Degree Studies as well as steps must be taken to propagate this knowledge through the traditional *ācāryas* for the study of comparative linguistics as well as for the software programming of phonemic in the computer and for the study of origin and evolution of alphabet. The conclusion also gives a series of pictures about the position of recitation of vedic *mantars*.

0.4. Method of study

The available printed *Śikṣā* texts have been taken into account and the method adopted is from a general review of other *Śikṣās* to the particular review and analysis, of *ŚYV Śikṣās*. The study attempts to elicit the authorship, the chronology and the content analysis of *Śikṣās* of *RV, SV, AV* and *KYV*, the comparative analysis of the *Śikṣās* of *ŚYV*. While proceeding through the comparative analysis, the texts of different *Śikṣās* have been studied and certain concepts have been taken for comparative analysis.

0.5. Source materials

The data for the present study are collected more from primary sources than from secondary sources.

- (a) Primary sources: For the survey and analytical study of different *Śikṣā* texts, the *Śikṣāsaṁgraha* edited by Ramprasad Tripathy, Sampurnananda University, has been chiefly taken into account. Besides this, various *śikṣā* texts have also been consulted as the *Śikṣāsaṁgraha* is mainly an edition of *ŚYV Śikṣās*. Separate editions of the *Nāradiya Śikṣā*, the *Vyāsa Śikṣā* etc. have been consulted.

- (b) Besides these, some analytical studies on *Śikṣā* texts have been consulted. The Critical Studies in the Phonetic Observations of Indian Grammarians by Siddheswar Varma, *Śikṣā svarūpa vimarśah* by Rammurti Chatruvedi, *Phonetics in Ancient India* by W.S. Allen etc. are the significant studies in this regard.

Besides these, related research articles have also been taken into account for analysis.

0.6. Objectives of the study

The followings are the objectives of the study:

- (a) To identify the *Yajurvedic Śikṣās* and to explore their peculiarities.
- (b) To determine the rules prescribed under different headings and their application in *ŚYV* text.
- (c) To analyse and compare the rules of different *Śikṣā* texts.
- (d) To examine whether these rules are practically followed today in vedic chantings or not.

0.7. Scope and coverage of the study

The study covers a wide range of *Śikṣās* starting from *RV* to *AV* with a special study of *Yajurvedic Śikṣās*. Moreover the comparative analysis has been done only of twentyfive *ŚYV śikṣās* and during such analysis, along with the peculiarities of 'ya' pronounced, as 'ja', va pronounced as 'bā', *anusvāra* pronounced as 'gum', specialities on the *raṅga*, *nāda*, *nāsikya* etc, the similarities and differences have also been taken into account.

The enumeration of *varṇas sandhi*, *svara*, *virāma*, *svarabhakti* etc. are some of the points which have been critically analysed here. The differences of different *Śikṣā* texts have also been attempted.

0.8. Limitations of the study

The study has been undertaken with some specific objectives to present an analysis of *Yajurvedic Śikṣās* as hinted earlier. It does not claim to have examined all the aspects of differences and similarities of *Yajurvedic Śikṣās*. Due to paucity of published books in this field, the comparative analysis has been done on certain significant aspects only. Due to time constraints and limited scope on the part of the individual scholar (myself), it could not pursue the relevant issues pertaining to *KYV* which will be taken up as separate studies in future.

Thus the present study is an humble attempt to make a critical study of the *Yajurvedic Śikṣās*, to search inherent techniques if any in the vast and elaborate process of vedic phonetics. Modern researchers may take up allied issues from *Śikṣā* literature and study them from linguistic point of view and also from the point of view of awaiting computational phonetic aspect. This is only an humble approach to bring into limelight the peculiarities of *Yajurvedic Śikṣās* specifically the *Śuklayajurveda śikṣās*. At last it may be concluded with an humble prayer to worship the eternal Vedas as:

stutā mayā varadā vedamātā
pracodayantām pāvamānī dvijānām /
āyuh prāṇam prajāṁ paśuṁ kīrttiṁ draviṇam
brahmavarcasam mahyam dattvā vrajata brahmalokam //
 (AV. XIX.71.1)

CHAPTER-I

**MEANING AND SIGNIFICANCE OF
ŚIKṢĀ AND GENERAL *ŚIKṢĀS***

CHAPTER-I

MEANING AND SIGNIFICANCE OF ŚIKṢĀ AND GENERAL ŚIKṢĀS

I.1 Definition of Śikṣā

Pāṇini derives the word *Śikṣā* from the desiderative of 'śak', (to be able). Thus the literal meaning of *Śikṣā* is "a desire to be able". Interestingly this meaning finally developed into "phonetics". The Vedas were taught through oral tradition only. Thus it may be assumed that the difficulties in reciting the Vedas in correct phonetic procedure were so great that those who wanted to learn the Vedas, had to make a strong effort to be able to recite the *mantras* correctly. Thus the original implication of "a desire to be able to recite the Vedas correctly" finally developed into a general sense of the study of phonetics.

The pronunciation of Vedic *mantras* is an extremely complex affair and this complexity arose through various phases in the development of the ancient speech. Comparatively speaking, the early Vedic reciters had lesser difficulties in pronouncing the Vedic *mantras* correctly than their successors of later times. Correct pronunciation of Vedas is regarded as the highest achievement on the part of the priest who is expected to be well-versed.

In his commentary to *RV*, Sāyaṇācārya has defined *Śikṣā* as "*svaravarṇādyuccāraṇaprakāro yatra śikṣyate upadiśyate sā śikṣā*" which means *śikṣā* is that treatise where instructions are laid down on the mode to pronunciation of *svara* and *varṇa* etc. In another place, he has further elaborated it as:- *śikṣā nāma yayā mantrāṇām*

padavarṇamātrā-svarādiḥ nānaṁ varṇoccāraṇavidhi parijñānapūrvaka-sthānādiparicayaśca bhavati // which means *Śikṣā* is known as that text by which the knowledge of *pada*, *varṇa*, *mātrā*, *svara*, the process of pronunciation and the places of utterance of the alphabet of the vedic *mantras* are made possible. The *Śikṣāvallī* of *Taittirīyopaniṣad* explains *Śikṣā* as:- *śikṣāṁ vyākhyāsyāmaḥ / varṇaḥ svaraḥ mātrā balam sāmā santāna ityuktaḥ* // which means *Śikṣā* is the explanatory text of the alphabet, accents, moras, places of utterance and various efforts, balance in utterance and euphonic combinations etc.

Further in the introduction of *Śikṣāsaṅgraha* two derivations have been given of *Śikṣā* as:

i) *śikṣayati yā sā śikṣā /*

ii) *śaktam śakto bhavitum icchā śikṣā /*

This is *yogarūḍha* and resorting to the *yogaśakti* of *śikṣāyati yā sā śikṣā*, any text that gives instructions on any subject is to be known as *śikṣā*. But here the *rūḍha* meaning is dominant rather than the *yōgārtha* and thus the texts which are conducive to the proper pronunciation of Vedic *mantras* are known as *Śikṣā*.

I.2 Origin of *śikṣā* as a science of phonetics and it's complexities

“*sākṣātkṛtadharmāṇa ṛṣayo babhūvuḥ* /”- As for this declaration of Yāska, the early Vedic seers who had visualized the *mantras* had lesser difficulties in pronouncing the Vedic *mantras* correctly. But later on the problem in pronunciation arose through various phases in case of successive seers. Correct pronunciation of the vedic *mantras* was

regarded as the highest achievement on the part of a priest. According to Patañjali the priest was expected to be well-versed in the proper inflexion syllabication, accent and articulation of speech sounds.

Even the period of Patañjali was marked for the decadence with regard to proper teaching of phonetics, as Patañjali had remarked that the Brahmins in the hoary past used to study grammar and after completing their initiation were given instruction on Vedic words when they had already learnt the vocal technique. But it was not so in Patañjali's time, when people reading the Vedas were gradually becoming reciters of the same. This shows the chronological distance between Patañjali and the early experts on Vedic phonetics. Correct pronunciation of speech sounds was regarded as the sole scope of *Śikṣā* at the earliest stage of its development and the phonetic teachings were imparted to students only through oral tradition. But later on they were codified in the form of *Śikṣā vedāṅga*.

I.3 *Śikṣā* as a part of *Vedāṅga*

The first information about the various constituents of *Śikṣā* occurs in the seventh book of *Taittirīyopaniṣad* which, for that reason, is also called the *Śikṣāvalli*.¹ According to the description, *Śikṣā* consists of (i) *Varṇa* (letters), (ii) *Svara* (pitch accent), (iii) *Mātrā* (quantity), (iv) *Bala* (stress), (v) *Sāma* (utterance in a medium tone) and (vi) *Santāna* (euphonic combination). The above translation of these terms is given after Śankara's commentary of the *Taitt. Up.* But different scholars have differently translated them, for example, Macdonell,²

-
1. *om śikṣām vyākhyāsyāmaḥ /
varṇaḥ svaraḥ mātrā balaṁ sāma
santānamityetat śikṣādhyāyah //* (*Taittirīyopaniṣad*-1.2)
 2. Macdonell, *History of Sanskrit Literature*, p. 256

following *Sāyaṇa* translates these as letters, accents, quantity, pronunciation and euphonic rules. Siddhesvara Varma translates *varṇa* as individual sounds, *svara* as accent and *santāna* as chanting of Vedic verses; But in this connection he ignores *bala*.³

W.S. Allen translates *varṇa* as sound unit, *svara* as tone, *mātrā* as quantity, *bala* as degree of buccal closure, *sāma* as tempo and *santāna* as junction.

While referring to the *Śikṣā*, in his introduction of the *Rgveda* commentary, *Sāyaṇa* thinks of the developed state of this *Vedāṅga* for he quotes the passage from the *Taittirīyopaniṣad*. The *Prātiśākhya*s probably belong to this developed stage of the *Śikṣā-vedāṅga* and that's why they have a much wider scope than the manual of the subject produced in the first stage. But when we go through the contents of *Prātiśākhya*s, we find that the scope of the *Śikṣā* as given in the *Taitt. Up.* applies to a considerable extent, to the *Prātiśākhya*s which may be regarded as secondary *Śikṣās*.

I.4 Differences between *śikṣās* and *prātiśākhya*s

There are a large number of differences between *Śikṣā* and *Prātiśākhya*. The *Prātiśākhya*s may be found to be wanting in certain respects. For example, the treatment of *sāma* and *bala* is non-existent in the *Prātiśākhya*s. As these two topics are matter of oral instructions, they were omitted by the *Prātiśākhya*s.

The *Vāj. Prāt.* (123-24) which is an elaborate one than the other *Prātiśākhya*s, deals with manual gestures for indicating accents and letters. But they have been elaborately dealt with in the *Śikṣās*.

3. S. Verma, *Critical Studies in the phonetic observations of Indian Grammarians*, p. 4

Some differences between *Śikṣā* and *Prātiśākhya* are stated below:-

- Rarely *Prātiśākhya*s deal with the varieties of *vivṛtti* (hiatus) and *svarabhakti* (vowel fragment), which are so accurately described and classified in the *Śikṣās*.
- Except *Vāj. Prāt*, no other *Prātiśākhya* treats of the varieties of the circumflex accent in the manner they have been dealt with in the *Śikṣās*.
- *Prātiśākhya* very rarely describes the relation of the seven musical notes with the three original accents viz. the *udātta*, *anudātta* and *svarita*. But this has been clearly described in the *Śikṣās*.
- Minute details regarding the general condition of correct pronunciation are exclusively found in the *Śikṣās*.
- Minute details regarding the relation of the vowel and consonant are a distinct contribution of the *Śikṣās*. It is important to note that for the explanation of all such subtle points the commentators on the *Prātiśākhya*s rely upon the *Śikṣās*.
- The *Śikṣās* unlike *Prātiśākhya*s, give interesting observations on the nature and quantity of *anusvāra* and *raṅga*, on the different modifications and designations of the *Visarjanīya*.
- Nearly all the *Śikṣās* give many valuable didactic verses towards the end, which are extremely useful to young students.
- *Śikṣās* unlike *Prātiśākhya*s describe the mode of pronunciation

of individual sounds giving beautiful similies intended for driving away the drudgery and dryness of the subject.

Maxmüller defines *Prāṭiśākhya* as a collection of phonetic rules peculiar to one of the different branches of four Vedas; to one of those different texts in which each of the Vedas has been handed down for ages in different families and different parts of India.⁴ Whitney in his edition of *Ath Prāt*, has subscribed to this view. The term *Prāṭiśākhya* has been etymologically explained by Mādhava as a treatise belonging to each individual branch or school of Vedas.⁵

This suggests that there were in existence as many *Prāṭiśākhyas* as there were schools in Vedas. Anantabhatta in the introduction to his commentary on the *Vāj. Prā.* defines the word *Prāṭiśākhya* as related with all the fifteen *śākhās* of white *yajurveda*. Durga in his commentary on the *Nirukta* takes the *Prāṭiśākhyas* as relating to more schools than one. Therefore it may be concluded that Max Müller might have misunderstood the word *Prāṭiśākhya*, for while he translates *prāṭiśākhyam* as “one” *śākhā*, it should be equivalent, more or less to each *śākhā* as the above authorities have already shown.

It is interesting to note that the *Prāṭiśākhyas* were sometimes called *Śikṣās*. Thus Uvaṭa, in his introduction to the commentary of the *Rk. Prāt*, has considered this work to be a *Śikṣā*. Vishnumitra speaks of *Rk. prāt.* as a *Śikṣā* treatise composed by Śaunaka. Madhusudan Saraswati, not only calls *Prāṭiśākhyas* as *Śikṣās* but also regards them as the *Vedāṅga*.

Besides all these, one of the *Prāṭiśākhyas* definitely speaks of

4. *Ancient Sanskrit Literature*, pp. 105-06.

5. *Prāṭiśākhyaṁ bhavaṁ prāṭiśākhyam* on *Śiddhanta Kaumudī*, IV.3

itself as a Śikṣā of sounds. A hard and fast line between Śikṣā and Prātiśākhya is hardly possible. Sāyaṇa was fully conscious of that, so he had ascribed a correct tradition to both Śikṣā and Prātiśākhya. Thus there was close interaction between Śikṣā and Prātiśākhya from the remote past leading to the advancement of both these classes of literature forming the basis of the Prātiśākhya, according to Vaidikābharaṇa and Uvaṭa's Śikṣā and grammar. Śikṣās being purely phonetic treatises, the Prātiśākhyas, on the other hand, are phonetico-grammatical works. Concerning the relation between Śikṣā and Prātiśākhya, Uvaṭa points out that the sounds of the alphabet are taught in the world; Rk. Prāt. selects only those sounds of the alphabet, which belong to its own śākhā.

The Vaidikābharaṇa states that the sounds enumerated in the Śikṣās are common to secular and Vedic pronunciation. Thus some Śikṣās mention sixty eight sounds, some sixty four (Pān. Śik.) and some, one hundred and eight (Laxmikanta Śikṣā). But Prātiśākhyas specify the sounds peculiar to their own vedic texts. Śikṣās prescribe rules of pronunciation common to all the śākhās without any specification, which however is made in the Prātiśākhyas. The Prātiśākhyas mostly presuppose Śikṣās of a general character. This may be confirmed by the observation of Ath. Prāt., which states that the origin of accent is not seen in the pada or saṁhitā texts. As the relation of pada or saṁhitā texts is the main scope of Prātiśākhyas, the Ath. Prāt. probably refers to those wider principles of accentuation that are embodied in the Śikṣās. Thus the scope is the specification of adoption of sounds that are prescribed by the Śikṣās. upadiṣṭo varṇasamāmnāyo laukiko vidyate,

*tatra yāvanto varṇā asyāñ śākhāyām upākhyāyante....(Rk. Prāt.)*⁶

Haug in his essay "The nature and value of Vedic accents" arrived at the conclusion that *Śikṣās* are decidedly older than *Prātiśākhya*s and that the doctrines of the former are incorporated and further developed in the latter. Burnell in his thesis, *the Aindra School of Sanskrit grammarians*" has subscribed to this view and ascribed the *Śikṣās* to the school of pre-pāṇinian grammarians.⁷ Kielhorn, on his own investigation and perusal of a large number of *Śikṣās*, observes that the views of two scholars require modification. He believes that there is at least one *Śikṣā*", the *Vyā. Śik.*, which is not older than *Prātiśākhya* as it follows the *Taitt. Prāt.*, that it may be regarded as nothing more than metrical version of the latter. There is still another among the extant *Śikṣās* viz. The *Sarvasammata Śikṣā* which contains the expression that if *Śikṣā* and *Prātiśākhya* are found at variance, the *Śikṣā* is said to be less authoritative as the deer is weaker than the lion.

Besides, there is a distinct reference to the author of *Rk. Prāt* in the *Yāj. Śik.*, which, while describing the mode of pronunciation of the *raṅga* vowel, has actually quoted the authority of Śaunaka. The *Vyā. Śik.*, in its treatment of the medium tempo, further quotes the *Prātiśākhya*s in plural.

Such distinct references to the *Prātiśākhya*s in the *Śikṣās*, can by no means prove that all the *Śikṣās* that have come down to us are later than *Prātiśākhya*s. This may be true of the majority of these treatises, which though bearing many high sounding and ancient names

6. Burnell, A.C. *On the Aindra School of Sanskrit Grammarians, their place in the sanskrit and subordinate literature*, 1875.

7. "Remark on the *Śikṣās*", *Indian Antiquary* (5) Bombay, pp. 141-44.

can easily be proved to be recent compilations. But there still remains the minority of these works, which on a careful perusal appears to be older than the *Prātiśākhya*s. One may not hesitate to agree with the view that the contents of the *Śikṣās* are in the main, as old as those of *Prātiśākhya*s. We may in this connection quote the words of W.S. Allen, "whilest it is likely that the *Prātiśākhya*s are based on an early *Śikṣā* (such as that referred to in the *Taittiriya Āraṇyaka*) our extant texts of the latter appear to be of later date than the former."⁸ Allen agrees with Varma in placing the *Prātiśākhya* in the period 500-150 B.C. and the extant *Śikṣā* literature between 800 and 500 B.C.

I.5 *Superiority of śikṣās over prātiśākhya*s

The chief object of all *Śikṣā* is to lay down rules for the proper recitation of the Vedas. They state in a general way, the physical and mental qualities essential for Vedic recitation. They lay down even the minutest rules for pronunciation of certain sounds and their euphonic combination. They treat of the musical modulation of voice, the right postures of the body and the gestures of hands and fingers, which form an essential part of the recitation. It may be easy enough to understand these rules when one sees them demonstrated. But anyone without hearing the recitation repeatedly will hardly be able to explain them with satisfaction. It is therefore necessary to take the help of traditional scholars, for any accurate, minute and intelligible description of these rules.

It is accepted that the teachings of the *Śikṣās* have been more fully developed in *Prātiśākhya*s. But it may be wrong as in whatever point one goes to compare these two classes of literature, one can easily

8. W.S. Allen, *Phonetics in Ancient India*, p. 5.

see that the teachings of the Śikṣās are more complete and more minute in details than those of *Prātiśākhya*s.

I.6 Versification in the Śikṣās

The tendency towards versification in the Śikṣās can be traced as early as the *Mahābhāṣya*, which, while pointing out the various defects of accentual pronunciation, quotes a verse which has all the appearance of being a Śikṣā verse. It is-⁹

*“grastam nirastam avalambitam hatam,
amb ūkṛtam dhmātamatho vikampitam /
samdaṣṭameṇīkṛtamardhakam drutam,
vikīṛṇametāḥ svaradoṣabhāvanāḥ” //*

That this verse was not composed by Patañjali is evident from his own testimony of “*apara āha*” which precedes this verse. Thus this was composed by a predecessor of Patañjali. The same verse with slight modification also occurs in such ancient texts as the *Nār. Śik.* (3.11.12) *Yāj. Śik.* (2.28.29) and *Ṛk. Pārt.* (xiv). It appears from the body of *Nār. Śikṣā* that this verse originally, did not also exist there, as it has been immediately preceded by the statement. “*etad viparīta-gītidoṣa ucyante, bhavanti cātra ślokāḥ*” which proves that it (this verse) is a quotation from external source about which we are, at present ignorant. The same might be spoken about *Ṛk. Prāt.* which, it is believed was originally existing in *sūtras*, but later on, it was versified, evidently for mnemonic advantage. From this, it may be concluded that the above verse originally existed in the *Yāj. Śik.* and that the statement “*apara āha*” of Patañjali referred to *Yājñavalkya*. It is interesting to note that

9. *Mahābhāṣya* critically edited by F. Kielhorn, P.B.LL-25-26

maximum *śikṣā* texts are written in simple and lucid verse forms.

I.7 Collection of *śikṣā* literature

Śikṣā literature though forms an important branch of Vedic literature, yet has not been given the attention which is it's due. Except the *Yājñavalkya* and *Pāṇ. Śik.*, the rest are little known to scholars. F. Kielhorn in 1876 collected for the first time, a large number of *Śikṣā* manuscripts from different parts of India. But he was unable to publish them because the manuscripts were full of scriptural and orthographical errors. In 1893 a collection of 32 *Śikṣās* entitled as “*Śikṣāsaṁgraha*” was published by Pandit Yugal Kishore Vyasa from some original manuscripts. Due to abundance of orthographical errors it was not critically edited by him. Further in 1929 Siddheswara Varma published his “Critical Studies in Phonetic Observations of Indian Grammarians” in which he has examined fifty-five *Śikṣās* and has given a general concept of “Indian Phonetic Literature.”¹⁰ Subsequently Acharya Ram Prasad Tripathy collected and edited the “*Śikṣāsaṁgraha*”, which is published from Sampurnananda Sanskrit University, Varanasi in the year 1989. Besides these collections, some significant single *Śikṣā* texts published so far are as follows:

1. *Pāṇ. Śik.* or *The Śikṣā Vedāṅga ascribed to Pāṇini* critically edited in all its five recessions by Monomohan Ghosh published by the University of Calcutta, 1939.
2. *Vyāsaśikṣā* along with Vedatājasa commentary of Sri Surya Narain Suravadhani and Sarva Laksanamanjari Samgraha of Sri Raja Ganpathi, edited by Acharya Sri P.N. Pattabhirama Sastri,

10. *Critical Studies in the Phonetic Observations of Indian Grammarians*, Munshi Ram Manoharalal, Delhi, 1st Indian Edition-1961.

Chaukhambha Sanskrit Sansthan, Varanasi, second edition, 2004.

3. *Nārādīyaśikṣā*- Exposition by Shivaraja Acharya Kaundīnnyāyana, Vidyābhavan Prācyavidyā Granthamālā, 126, Chaukhamba Vidyabhavan, Varanasi, Reprint, 2002.
4. *Varṇoccāraṇa Śikṣā*- Arya Sahitya Mandala Limited, Ajmer.
5. *Yājñavalkya Śikṣā* with exposition by Dr. Naresh Jha, Chaukhamba Surabharati Prakashan, Varanasi, 1st edition 1999.
6. *Sampradāyaprabodhinī Śikṣā*, Pt. Sri Gopal Chandra Mishra, Vidyabhavan Pracyavidya Granthamala Chowkhamba, Varanasi, 1999.

I.8 The chronology of Śikṣās

The chronology of Śikṣās is very obscure, as, like other sanskrit works, a very few of them quote any authority or give any geographical data. Moreover the informations if at all found are so common in various Śikṣā texts that it becomes difficult to decide exactly the originality of these data. The commentaries on Śikṣā are also very few and most of the commentaries are also obscure. Moreover the corruption in the text of the MSS. also creates a lot of difficulties to know exactly about their chronology. The repetition of verses makes it impossible to judge the original text of a particular Śikṣā. As observed by S.Varma, “Generally speaking, however, most of the Śikṣās as they exist in their present form bear the stamp of recency”.¹¹ Some Śikṣā texts refer to the *Prātiśākhya*s whereas some follow closely the *prātiśākhya*s. The extant Śikṣā texts may be classified as follows:

11. S. Varma, Critical Studies....., p. 29.

1. General Śikṣā
2. Śikṣās of Ṛgveda
3. Śikṣās of Śukla Yajurveda
4. Śikṣās of Kṛṣṇa Yajurveda
5. Śikṣās of Sāmaveda
6. Śikṣās of Atharvaveda

Under the general Śikṣās, *Pān. Śik.* is the most important treatise owing to its complete character and it has two main recensions belonging to *Rv.* and *Yv.*

Among the *Ṛg* vedic Śikṣās the *Svara-vyañjanaśikṣā* quotes the *Rk. Prāt.* and it is post-Pāṇinian. As remarked by S.Varma, the work follows the *Rk. Prāt.* for it not only quotes in full two verses from it (IV. 8.9), but also uses throughout the terminology of this *Prātiśākhya*, such as various terms of *sandhi*, *nitya*, *bhugna*, *kṣaipra* (*Rk. Prāt.*, II.8), *anuloma sandhi* (*Rk. prāt.*, II.3), etc. The work is post-Pāṇinian for it quotes Pāṇini, VII.4, 28 and VI. 1, 168.

The *Pārā. Śik.* names eight Śikṣās among which *Yāj. Śik.* is the most complete Śikṣā. Regarding its date and time, everyone draws a very confusing view. Somasarma has mentioned *Yājñavalkya's* name in his opinion on quantity. As Somasarma is a recent name so *Yājñavalkya's* upper limit should not be earlier than 5th century A.D. With Uvaṭa's data, it is assumed that the *Yāj. Śik.* is about three centuries earlier than the *Vyā. Śik.* So approximately *Yāj. Śik.*'s date cannot be assigned to more than thirteenth century. The *Vyā. Śik.*, the second in the list of the Śikṣās of the white *Yajurveda* is mainly selected from the *Sarvānukramaṇī*. From terms and accents traced in this Śikṣā, it is no doubt a work mainly employed in the later phase of vedic literature. The rules of metres

prescribed in the *Kātyāyana Śikṣā* are repeatedly stated in the *Vāj. prāt.*, so it is more recent and a later work than *Vāj. prāt. Pārā. Śik.* mentions nearly all the leading *Śikṣās* of white *Yajurveda*; it should be posterior to them. Its kernel is comparatively older, but its modernity is confirmed from the pronunciation of 'v' in various positions. *Goutamī Śikṣā* refers mainly to *Prātiśākhya*, so its date is posterior to some extinct *Prātiśākhyas*. Amogh. *Śik.* also follows *Vāj. Prāt.* So it is posterior to *Vāj. Prāt.* Thus it is stated clearly that the lower limit of the four complete *Śikṣās* i.e; *Yāj. Śik. Pārā. Śik. Amogh. Śik. and Varn.pra. Śik.* is 10th century A.D. Regarding *Bhā. Śik.*, everyone is in a mysterious state. The author of *Siddhānta Śikṣā* mentions the name of Bhāradvāja as the first among the list of the *Śikṣās*. Lüders put the date of *Vyā. Śik.* at the middle of the thirteenth century. *Sambhū Śikṣā*, according to some expert phoneticians is a contemporary of the *Vyā. Śik.* The *Vāś. Śik.* as to Lüders opinion seems to be older than *Vyā. Śik.* In *Sarvasammataśikṣā*, certain portions are found to be repeated of *Vyā. Śik.* So it is a more recent work than *Vyā. Śik.* The *Veda-lakṣaṇānukramaṇikā*, a manuscript work refers to nine primary *Śikṣās* as follows:

1. *Bhāradvāja Śikṣā*
2. *Vyāsa Śikṣā*
3. *Sambhū Śikṣā*
4. *Pāṇini Śikṣā*
5. *Kauhalīya Śikṣā*
6. *Baudhāyana Śikṣā*
7. *Vāsiṣṭhī Śikṣā*
7. *Vālmīki Śikṣā*
8. *Hārīta Śikṣā*

The secondary Śikṣās mentioned by *Veda-lakṣaṇānukramaṇikā* are:

1. The *Sarvasammata Śikṣā*
2. The *Āraṇya Śikṣā*
3. The *Siddhānta Śikṣā*

Āraṇyaśikṣā is written in a later period as it speaks itself as nectar extracted from the ocean of the nine Śikṣās. All the primary Śikṣās including *Vyā.śik.* must be more recently enumerated than the Bhatta Bhaskara Mishra and Gangesha. Bhatta Bhaskara Mishra lived according to Burnell at about 950-1000 A.D. and the date of Gangesha is 1150-1200 A.D. The authors mention *Tribhāṣyaratna* and *Vaidikābharaṇa*, so it should therefore have been presumably composed before the fifteenth century A.D. As *Vyā.śik.* borrowed a portion from the *Kālanirnaya Śikṣā*, so it should be earlier than the thirteenth century A.D. *Pari.Śik.* is earlier than the *Siddhānta Śikṣā*, as it is quoted by *Vaidikābharaṇa* and *Tribhāṣyaratna*. So the lower limit for the date of its composition is 15th century A.D. The *Nār. Śik.* is one of the old treatises, mainly attributed to *Nārada*. Regarding its date we have to depend on external evidence. The lower limit of its date may be pushed back several centuries before *Sangītaratnākara*, its date was possibly the 5th century A.D. and it is the probable date of Bharata's *Nāṭya Śāstra*. As this treatise seems to be one of the oldest of the Śikṣās, its chronology cannot be given so early as to precede even the *Prātiśākhya*s. It is posterior to *Varṇsa Brāhmaṇa*. The chronology of *Lomaśī Śikṣā* is shrouded in mystery, so also the date of *Goutamī Śik.* remains fully unsolved. *Nār. Śik.* is contemporary with or posterior to *Yāj. Śik.* of the tenth century A.D. So the Śikṣā literature is extended to a period as late as 12th to 15th century A.D.

I.9 The General Śikṣās

Before going to discuss about the importance of *Yajurvedic Śikṣās*, it is essential to write something or to gain knowledge about general *Śikṣās*. General *Śikṣās* are just like stepping stone to *Yajurvedic Śikṣās*: Among them, *Pāṇinīya Śikṣā*, *Āpiśaliya Śikṣā sūtra*, *Śikṣā Samuccaya*, *Kālanirṇaya Śikṣā*, *Pari Śikṣā*, *Kauṇḍinyāyana Śikṣā* are noteworthy. First it is important to discuss about *Pāṇinīya Śikṣā*.

I.9.i *Pāṇinīya Śikṣā*

It has been critically edited in five recensions by M. Ghosh, the five recensions are:-

1. The *Agni purāṇa* recension.
2. The *Ṛgveda* recension.
3. The *Yajus* recension.
4. The *Pañjikā* recension.
5. The *Prakāśa* recension.

The *Agni Purāṇa* contains the shortest available text of the *Pāṇ. Śik.* and this recension mostly resembles the reconstructed text of the *Pāṇ. Śik.* Ghosh has given sufficient reasons for the assumption of this recension. The *Pañjikā* recension has been reconstructed by conjecture from the commentary called *Śikṣā Pañjikā*. It is sometimes wrongly identified with *Yajus* recension. Comparing the *Pañjikā* with *Prakāśa* recension, it appears that the latter is an inflated version of the former. There are no sufficient data to suggest any precise date for the *Pañjikā* recension. But it appears by no means recent, as it quotes Audavrājī mentioned in the *Nār. Śik.* which, except for its interpolated passage is as old as 200. B.C. Audavrājī has also been mentioned in the *Ṛk. tantra*

Vyākaraṇa, and the *Śikṣā Prakāśa* another commentary, on the *Pāṇ. Śik.* Since Audavrāji, has not been mentioned in any of the recent treatises on phonetics it appears that this work, was lost in course of time, and that the author of the *Pañjikā* probably flourished earlier than the time when Audavrāji's work was still available. This was also the case with the authors of *Ṛk. tantra Vyākaraṇa* and *Śikṣā Prakāśa* between 1000 A.D. and 1300 A.D. the *Pañjikā* recension in 1200 A.D. and the *Agni Purāṇa* recension in 800 A.D.

The *Prakāśa* recension like *Pañjikā*, was also reconstructed by conjecture from the commentary called the *Śikṣā Prakāśa*. Ghosh has taken it as a separate recension. The *Yajuṣ* recension of *Pāṇ. Śik.* has been edited by Weber in his "Indische Studien" (iv, pp. 345 ff). This was adopted by Ghosh for his purpose. The *Ṛk.* recension of *Pāṇ. Śik.*, has also been edited by Weber in his Indische Studien (iv. pp. 345ff) on the basis of three MSS. After comparing it with the *Pañjikā* recension, Ghosh has adopted this edition omitting some minor details.

The *Ṛk.* recension is much older than 18th century, for its MSS. used by Weber are all later than 1833 *Vikramasamvat*. This is the most inflated version of *Pāṇ. Śik.* and contains 60 stanzas divided into 11 sections. 18 verses have been taken genuine by Ghosh. Other 42 verses of the present recension, may be regarded as later additions and may be traced to some late *Śikṣās*. Ghosh accepts the *Ṛk.* recension as the origin of the *Pañjikā*, *Prakāśa* and *Yajuṣ* recensions, although the *Ṛk.* recension, in its kernel, and the *Agnipurāṇa* recension were both adopted from the latter texts of *Pāṇ. Śik.*

There are two existing commentaries on *Pāṇ. Śik.*:-

a) *Śikṣā Pañjikā*

b) The *Śikṣā Prakāśa*(a) *Śikṣā Pañjikā*

Of the two available commentaries of the *Pāṇ. Śik.*, the *Śikṣā Pañjikā* is written in a simpler style, and has better acquaintance with the old phonetical traditions.

It defines *Śikṣā* as the science by which the pronunciation of speech sound is learnt.

“*śikṣyate'nayā varṇoccāraṇamiti śikṣā*”

This is to be compared with the term “*Varṇa-Śikṣā*” occurring in *Rk. Prāt.*, (xiv.30) which possibly does not mean *prātiśākhya*, but simply relates to a *śikṣā* of the earliest period. Instead of one, it speaks of two *anusvāras* viz. *anusvāra*, and *nāsikya*, which is sometimes shortened as “*nāsikya*” or “*nāsikā*”.

It is important also on account of the information it gives about Audavraji who has been mentioned in four other works.

1. *Nārādī Śikṣā* (118.5)
2. *Śikṣā Prakāśa* commentary to *Pāṇ. Śik.*
3. *Varṇśa Brāhmaṇa* of *Sāmaveda* and
4. *Rk. tantra* (S-60)

Besides, the *Pañjikā* quotes such authoritative works as the *Aitareya Brāhmaṇa*, *Chāndogya Upaniṣad*, *Paṇini's Aṣṭādhyāyī*, *Uṇādi Sūtras*, *Bhagavadgītā*, *Patañjali*, *Manu Saṁhitā*, *Rk Prātiśākhya*, and the *Nārādī Śikṣā*, for the validity of its statements.

(b) The *śikṣā prakāśa*

Though it is inferior in worth to *Pañjikā*, it has its importance for the following reasons.

- a) It ascribes the authorship of the *Pāṇ. Śik.* to Piṅgala who is said to be the younger brother of Pāṇini.
- b) It defines *Śikṣā* as a science for the utterance of proper accents and speech sounds (*Śikṣā svara varnoccārātmakarī śāstrinī*)

This is different from the definition given in *Pañjikā* where speech sounds are only the subject of instruction. It may be assumed that the two definitions point to two distinct traditions having their origin in two successive stages in the study of vedic phonetics. It has quoted passages from Pāṇini, Yaska, Nārādī, Goutamī, Śaunaka, Patañjali and Audavraji. The fact that it does not quote any of the late *Śikṣās*, except Nārādī and Goutamī probably shows that it is an old commentary.

I.9.ii. *Śikṣā Samuccaya*

It is different from "*Śikṣā Samuccaya*" compiled by *Sāntideva*, which is a compendium of Buddhist teaching derived from early *Mahāyāna sūtras*. It has been edited by C Bendall and published in the *Bibliotheca Buddhica*, of 1897. Verma includes this work in the list of abbreviations to his "critical studies."

The work dealing with phonetics bearing the same name is the one described by Kielhorn, in his article. "Remarks on the *Śikṣās*." This *Śikṣā* cites *Ātreya*, *Nārada*, and *Parāśara* and the *Śikṣā* treatises

attributed to some authorities. It has freely used *Pāṇ. Śik.* Hence it must be later than *Pāṇ. Śik.* It contains about three hundred *ślokas* divided into 24 chapters with following titles.

(i) *svrabhakti*, (ii) *dviroṣṭhya*, (iii) *prayatna*, (iv) *anusvāra*, (v) *anunāsika*, (vi) *mātrā*, (vii) *ekaśruti*, (viii) *varṇayatva* (enphonic change), (ix) *kathaka* (completion of chandas), (x) *dvirukti*, (xi) *apūrva*, (xii) *yama*, (xiii) *krama*, (xiv) *jaṭā*, (xv) *raṅga*, (xvi) *kampa* and (xvii) *aṅga* (syllabication).

I.9.iii. *Kālanirṇaya Śikṣā*

This *Śikṣā* is exclusively devoted to the quantity of vowels. It had come to the notice of Whitney and Lüders. But they could not trace it out. Burnell suggested it's date as the 14th century and thought it to be a work of *Sāyaṇa*.¹² But since it has borrowed a chapter from *Vyā. Śik.* it should be earlier than the 13th century, the date of *Vyā. Śik.* As regards the upper limit of it's date, no particular data are available, but this work is evidently posterior to *Prātiśākhya*s, for in the introductory verses the author says- "after studying according to my lights, the *śāstras* like the *Prātiśākhya*s, I proceed to describe quantity for the comprehension of Vedic truth" (Verse-5). Several verses quoted by the *Tribhāṣyaratna* and *Vaidikābharaṇa* can be traced out in this *Śikṣā*. It has been accompanied by a commentary named the *Kālanirṇaya Dīpikā* by one *Muktiśvarācārya*. On his view on quantity, the author of this *Śikṣā* sometimes differs from Patañjali.

I.9.iv. *Pāri śikṣā*

It is a complete *Śikṣā* with a lucid commentary. Aufrecht in his

12. *Aindra School of Grammarians*, p. 49.

“*Catalogus catalogorum*” identifies Pāri with the Pārāśarī. This shows his lack of acquaintance with the *Pāri. Śik.* for it has little similarity with *Pārāśarī Śik.* The name of the author is Cakra who represents the views of Pāri on phonetics. The name Pāri comes in the list of sages such as Bhāradvāja, Vyāsa, Pāri, Śambhū etc, who had composed their respective treatises on phonetics. The name “Pāri is not to be met with elsewhere in Sanskrit literature. It can hardly be taken as an orthographical error for “Pāṇinī” because the commentator on his *Śikṣā* also calls Pāri *Śikṣā* as has been quoted by *Tribhāṣyaratna*. It contains striking observations on doubling, quantity and accent.

1.9.v *Āpiśali śikṣā sūtra*

The phonetic *sūtras* of *Āpiśali* escaped the notice of the vedic scholars for long, until Raghuvir (1934) published a critical edition of the text (from two MSS. of the Adyar Library) in the Journal of the vedic studies (Lahore). The fact that *Āpiśali* was a predecessor of Pāṇinī and the author of a grammatical treatise, is evident from the *Aṣṭādhyāyī* (*vā supyāpiśaleḥ* vi.1.92). It is not easy to ascertain the exact time intervening between *Āpiśali* and Pāṇinī--the two authorities on grammar.

The statement '*aṣṭaka āpiśala pāṇiniyaka*' occurring in the *Amoghavṛtti* of *Abhinava Śākaṭāyana* makes one believe that like Pāṇinī's *Aṣṭādhyāyī* the *Āpiśala* system of grammar had eight chapters- all composed in *sūtras*, almost similar in form and matter to those of Pāṇinī. Similarly, the *Āpiśala* system of phonetics is almost coincident with that of the Pāṇinian system composed in *sūtras*. Like pāṇinī, *Āpiśali* also composed the appendix to his work. A number of quotations from his *Dhātupāṭha* and *Gaṇapāṭha* can easily be traced in many ancient treatises. Of all the existing *Śikṣās*, that of *Āpiśali* is the most suitable for the

beginner. It deals exhaustively with the mode of production of the sound material and it's final culmination into individual articulate sounds. It ignores altogether the complicated modifications which the sounds are liable to undergo in connected speech. It is not associated with any particular branch of the Veda. As a general phonetic introduction to grammar, it has never been superseded by any other treatise. *Āpiśali* is not popular with vedic students of a particular recension, but those of Pāṇinian and non-Pāṇinian schools of grammar have used the *Āpiśali Śik.* extensively. Many passages from the *Āpiśali Śik.* have been quoted by some of the ancient authorities whom Raghuvir mentions towards the end.

I.9.vi. *Śikṣā sūtras of Pāṇini or Varṇoccāraṇa śikṣā*

A set of phonetic *sūtras* has been attributed to Pāṇini by Svami Dayananda, which occurs in his *Varṇoccāraṇaśikṣā*. The first part of *vedāṅga prakāśa*, which is written by Svami Dyananda is known as *Varṇoccāraṇaśikṣā*. This is completely different from the various versions of *Pāṇinīya Śikṣā*. This is not a versified *Śikṣā*, but is in *sūtra* form. There are in total 86 *sūtras* of which 2-4 *sūtras* are in the form of verse. This recension has 8 *prakaraṇas* along with one introduction.

In this *Śikṣā*, first of all the etymology of “*akṣara*” *śabda*, the origin of sound and the significance of knowledge of *varṇas* have been stressed upon. Then sixty three *varṇas* have been enumerated along with definition of *śabda*, the characteristics of *svara*, like *udātta*, *anudātta*, *svarita*, the *hrasva*, *dīrgha* and *pluta* as well as the short and long divisions of alphabet have been dealt with. Then the character of consonants, the lacunas in the utterance of vowels and consonants have been discussed in this *Śikṣā*. In the preface to this book, Dayananda

writes that he had secured a manuscript of these *sūtras* after a laborious search. No second manuscript of these has been available to any other scholar since the time of its first discovery by Svami Dayananda. This fact led M.Ghosh to conclude that the phonetic *sūtras* attributed to Pāṇini, were collected from different sources such as the *Mahābhāṣya* and the *Varṇa sūtras* of Candragomin, by some late grammarian, probably Dayananda himself, who might have fathered these on Pāṇini for gaining a superior authority.

But S.K. Gupta in his article "Authorship of the phonetic *sūtras* edited by Dayananda"¹³ has tried to refute M.Ghosh by pointing out that the latter's view is mostly based on conjecture and hypothesis as evident in his reconstruction of the *Pāṇ. Śik.* in five recensions. In accusing Svami Dayananda of literary forgery, Ghosh seems to be somewhat malicious towards him. Gupta questions: "Was there any time or circumstance which suggested to Dayananda to forego these *sūtras* on Pāṇini? Or is there any reason to disbelieve the statement of Dayananda, that he had secured a manuscript of these *sūtras* after a laborious search"?¹⁴

The above two questions can easily be set at rest the moment one takes into consideration the phonetic *sūtras* of *Āpiśali*, composed in eight chapters, resembling the *sūtras* of *Varṇoccāraṇaśikṣā* in content, arrangement and style. Should one then conclude that the *Āpiśala sūtras* too, are an imitation of the *varṇa sūtras* of Candragomin? Certainly not.

The *sūtrakāra* Pāṇini and the *śikṣākāra* Pāṇini appear to have been two different persons. Otherwise it remains inexplicable as to why Pāṇini wrote his famous *Aṣṭādhyāyī* in *sūtras* and the phonetic rules in

13. Poona Orientalist-1951.

14. Ibid.

verses. He should and must have adopted the same style of *sūtras* for writing the phonetic rules. This is further corroborated by the first verse of the *Pāṇ. Śik.* which states that the verses that follow, embody the teachings and views of Pāṇini on phonetics. The first verse, thus leads one to the supposition that the rules written by Pāṇini were existing in *sūtras*. One is therefore inclined to consider the phonetic *sūtras* edited by Dayānanda as genuine works of Pāṇini. It is very likely that like the *Aṣṭādhyāyī*, these *sūtras* might have suffered some interpolations.

I.9.vii *Varṇasūtras* of Candragomin

Liebich¹⁵ in his "Das Datum Candragomin's and Kālidāsa's" fixes the lower limit of the date of these *sūtras* in the seventh century A.D. In Kalhaṇa's *Rājatarāṅginī* and Bhartṛhari's *Vākyapadīya*, it has been stated that Candragomin recovered the mutilated text of the *Mahābhāṣya* at the command of Abhimanyu, the then king of Kashmir. According to Varma and Ghosh, Candragomin had exercised a considerable influence on the later grammarians of the Pāṇinian school. But S.K. Gupta¹⁶ and Pandit Yudhisthira Mimāṃsaka¹⁷ held just the opposite view. According to Gupta, Candragomin, rather was immensely benefited by the *Aṣṭādhyāyī*, *Mahābhāṣya* and the *Uṇādi sūtras* of Pāṇini's school. Likewise, he was also benefited by the phonetic *sūtras* of Pāṇini, which Ghosh regards as a mere product of the re-edition and amplification of the *Varṇasūtras* of Candragomin. But this view of Ghosh is being refuted on the basis of the phonetic *sūtras* of *Āpiśali* which may be regarded as old as or perhaps, older than the phonetic *sūtras* of Pāṇini.

15. Bresluk, 1903, p. 11

16. "Authorship of the Phonetic *sūtras* edited by Dayānanda" Poona Orientalist, 1951

17. *sanskṛt vyākaraṇa-śāstra kā itihās.*

The *Varṇasūtras* of Candragomin are almost based on those of *Āpiśali*. Nevertheless, the Cāndra School of grammarians is undoubtedly one of the earliest coming only after the *Kātantra*, and was once spread throughout the whole Buddhist sphere of Sanskrit studies. Candra's grammar has been utilized even by the authors of *kāśikā*. Candra wrote the grammar, its commentary, *uṇādisūtras*, *gaṇapāṭha*, *dhātupāṭha*, *liṅgānuśāsana*, *upasargavṛtti* and also the *varṇasūtras*.

The arrangement of the *varṇa sūtras* is the same as that of *Āpiśala sūtras*. In using the minimum number of syllables and in maintaining uniformity of expression, Candra has closely followed *Āpiśali*. The name of *sthāna*, *karaṇa* and *prayatna*, always opens the *sūtras* which have mostly the nominative singular termination. Being a Buddhist, Candra does not recognize the vedic verse and excludes the first *Āpiśala* verse from his treatise, which is devoted to the description of *Śabdabrahma*.

I.10 Comparison of *Āpiśali*, *Varṇoccāraṇa* and *Varṇa sūtras* of Candragomin

I.10.i *sthāna prakaraṇa*

- 1) *ākāśavāyuprabhavaḥ śarīrāt sammuccaran vaktramupaiti nādaḥ /
sthānāntareṣu pravibhajyamāno varṇatvamāgacchati yaḥ sa śabdaḥ/*

Pāṇ. Ś.S.-1 Candra (wanting)

The verse attempts to give a definition of *Śabda* as follows:-

The inarticulate sound, originating from the sky and the wind and rising up from the body, enters the mouth; and being obstructed at various places of articulation attains the quality of the articulate sound; that is the word.

2) *tamakṣaram brahma param pavitram guhāśayam samyaguśanti viprāḥ/*
saśreyasā cābhyudayaena caiva samyak prayuktaḥ puruṣam yunakti//

Pāṇ. Ś.S., i. 2. Candra (wanting)

Candra being a Buddhist, might have omitted this verse from his treatise. This verse has been dedicated to 'akṣara', syllable. Etymologically 'akṣara' means indestructible. It is the highest purifying agent. Its nature is ever shrouded in mystery. Hence the wise men are desirous of revealing its nature. Rightly employed, it brings happiness and prosperity to its devotee.

3) *sthānamidaṁ karaṇamidaṁ prayatna eṣa dvidhā, anila*
sthānam pīḍayati vṛttikāraḥ prakrama eṣo'tha nābhitalāt.

Pāṇ. Ś.S. i.4. Candra (Wanting)

This gives a synopsis of the chapters to be dealt with in the treatise. These are:

- i. Place of articulation (*sthāna*)
 - ii. Articulator (*karaṇa*)
 - iii. Two kinds of articulatory process (*prayatna*)
 - iv. The pressure of wind on the articulatory organs
(*anila-sthāna-pīḍana*)
 - v. Phonetic observations of the commentators (*vṛttikāra*)
 - vi. Succession of letters (*prakrama*)
 - vii. Neural process in the production of sounds (*nābhitala*)
- 4) *tatra sthānakaraṇaprayatnebhyo varṇāstriṣaṣṭiḥ / (candra)*
sthānakaraṇaprayatnebhyo varṇā jāyante // Pāṇ. Ś.S.

Letters, produced through place of articulation, articulator, and articulatory effort, are sixty three in number. Pāṇini simply enumerates

the sounds without mentioning ‘*sthānakaraṇaprayatnebhyo*’ which *Āpiśali* mentions. Since a *sūtra* always guards it against proximity, Pāṇini is justified to omit this portion from his *sūtras*. Candra on the other hand does not enumerate the sounds but mentions how they are produced. One can easily omit the *sūtra* ‘*sthānakaraṇaprayatnebhyo varṇā jāyante*’ which appears to be redundant in the treatise.

5) *tatra varṇānām keṣām kiṃ sthānām kiṃ karaṇām prayatnaśca kaḥ keṣām ityucyate. Pāṇ. Ś.S. Candra (wanting)*

This *sūtra* questions about the ‘*sthāna*’ ‘*karaṇa*’ and ‘*prayatna*’ of individual letters.

6) *tatra sthānām tāvat, Candra : Pan. Ś.S. (wanting)*

7) “*akuḥavisarjanīyāḥ kaṇṭhyāḥ*” cp. *Nyāsa* (Part i.p.58) *Pāṇ. Ś.S.5: Candra 3.*

‘*a, ka, kha, ga, gha, ṇa, ha* and the *visarjanīya* are glottals (*kaṇṭhya*). The word ‘*kaṇṭhya*’ is generally translated as guttural being derived from ‘*kaṇṭha*’ which is non-technical usage *kaṇṭhya* means, ‘throat’ or more specifically the aperture of the throat. The word ‘*kaṇṭha*’ in it’s technical sense denotes the ‘glottis’. Vopadeva regards “e” as a glottal sound.

8) ‘*ha-visarjanīyāvurasyāvekeṣām*’ *Pāṇ. S.S.-6, Candra (wanting)*

According to some, ‘*h*’ and the *visarjanīya* are pulmonic. The word ‘*uras*’ denotes the ‘chest’; ‘*h*’ and the *visarjanīya* in certain contexts, are chest sounds.

- cp. (i) *Rk.prā.* I (39) ‘h’ and the *visarjanīya* are glottal; or as some say pulmonic
- (ii) *Rk.prā.* 2.3 ‘h’ and the *visarjanīya* are glottal; the *visarjanīya* is alternatively regarded as pulmonic.

9) ‘*jihvāmūlīya jihvyaḥ*’ *Pāṇ. Ś.S.-7*, Candra, 13.

The *jihvāmūlīya* is lingual or velar. In calling the *jihvāmūlīya* a velar sound, Candra is more clear than *Āpiśali*. The term literally means “formed at the root of the tongue”; hence it should be regarded as velar. Abhayacandra in his commentary on the *Śākaṭāyana prakriyā saṁgraha* (*sūtra*, 6) regards the *jihvāmūlīya* as a glottal sound. In one sense, he might be right; for, the *jihvāmūlīya* is an *ayogavāha* sound; an *ayogavāha* sound becomes homorganic with the letter on which it depends; since the *jihvāmūlīya* depends on ‘k’ and ‘kh’, it should be homorganic with these two letters; in other words, it should be glottal. But it cannot be so asserted on account of the prevailing controversy on the place of articulation of the ‘k’ mute-series. While the authors of the phonetic *sūtras* invariably treat this series as glottal, Piṅgalācārya (the author of the versified *Pāṇ Śik.*) and others, treat it as a velar series. It seems, however, that the *sūtrakāras* are more accurate in *jihvāmadhya* etc., as more appropriate as a name of an articulator (*karaṇa* name) rather than that of a place of articulation (*sthāna nāma*) which Piṅgalācārya takes to be (*jihvāmūla tu kuḥ proktaḥ*) etc. *Pāṇ. Śik.*

10) ‘*kavargavarṇānusvārajihvāmūlīya jihvya ekeṣām*’

Pāṇ. Ś.S. 8.; Candra (wanting)

According to some, the ‘k’ mute-series, ‘a’, *anusvāra* and the *jihvāmūlīya* are velar. Pāṇini does not recognize *anusvāra* as a velar

sound; hence the corresponding *sūtra* has ‘r’ instead of *anusvāra*. (*kavarga rvarṇasca jihvyah*). The term ‘*jihvya*’ etymologically means originating from the tongue, without referring to its parts. But Pāṇini and Āpiśali use it in the sense of *jihvāmūlīya*. Candra excludes this *sūtra* from his treatise; it seems he is not satisfied with the term ‘*jihvya*’ which being generic, may at once denote the root, middle, top etc. of the tongue. Hence he uses the term ‘*jihvāmūlīya*’ for ‘*jihvya*’, and thus, he may be more accurate in his observation than Āpiśali or Pāṇini.

11) “*sarvamukhasthānam avarṇam eke*” Pāṇ. Ś.S. i.9; ‘Candra (wanting). Cp. *Mahābhāṣya* I-1.9; *Bhāṣāvṛttivivṛti* of Śṛṣṭidhra, i.1.9

According to some, ‘a’ is articulated in the entire mouth. For ‘*mukha*’ Pāṇini uses the word ‘*āsyamātra*’. The term ‘*āsyā*’ refers to the area from the lips to the ‘*Kakālakā*’ (*oṣṭhāt prabhṛti prāk kakālakāt*, *Mbh.i.1.5*), the thyroid cartilage or ‘Adam’s Apple’. (*grīvāyām unnataḥ pradeśaḥ*, Kaiyyata on *Mahābhāṣya*)

12) ‘*icuyasāstālavayāḥ*’ Pāṇ. Ś.S.11; Candra 10. Cp. *Nyāsa*, Part 1.P.58 ‘i’ ‘ca’, ‘cha’ ‘ja’, ‘jha’ ‘ña’ ‘ya’ and ‘śa’ are palatal. ,

There is no difficulty with regard to the term ‘*tālu*’. The palatal plosives are pronounced like prepalatal affricates in M.I.L. (Grierson, J.R.A.S., 1913, pp. 391 ff.)

13 & 14) “*ṛturaśā mūrdhanyāḥ*”, “*ra dantamūlasthānam ekeśām*” Pāṇ. S.S.12-13; Candra. 6.

The word ‘*mūrdhanya*’ is derived from ‘*mūrdhan*’, ‘head’. The commentator on the *Taitt.Prā.* (ii.37) explains it as ‘*vaktravivaroparibhāga*’, upper part of the mouth cavity. Max Müller

(*Rk.Prā.*-44) equates this term with the Greek 'ouranos' (lit. vault of heaven), applied to the roof of the mouth. Pike (Phonetics, p.123) translates 'mūrdhanya' as cacuminal although it is generally translated as cerebral. However, the modern translation of the term, is 'retroflex', which, though not literal, is interpretative. For, the 'ṛa' mute-series involves a special process rather than a place of articulation. Jacobson regards the retroflex series as a later addition to the Indo-Aryan from the Dravidian tongue (Allen, op.cit.p.53, f.n.6).

There are divergent views on the place of articulation of *r* and *r̥*. All the *Prātiśākhya*s state that '*r*' is an alveolar sound. The alveolar position is indicated by the term '*dantamūla*', root of the teeth. The *Yāj. Śik.* (p.154) states that among all alphabetic sounds '*r*' alone is alveolar. The *Rk.Prā.* quotes some authorities who regard '*r*' as '*vārtsya*', produced from the teeth-ridge. The term '*vārtsya*' has been explained by Uvata as denoting 'the projection behind the roots of the teeth' which in Pike's terminology is the alveolar or rather the gingival arch, since the contact is made against the gum, not the bone (op.cit.p.122). Sweet in his 'Primer' (p.8) distinguishes the teeth-rim (*mūla*) from the teeth-edges (*agra*). The *Pāṇ. Ś.S*-14 and some other authorities regard the dental series (*ta varga*) as alveolar. "In such cases the reference is to the junction of the teeth with the gums, and the alveolar position of '*r*' is then clearly distinguished by a further description e.g. for *r̥*, contact is made by the centre of the tongue-tip behind the roots of the teeth" (Allen, op.cit.p.54 ff.). The *vaidikābharaṇa* on *Taitt. Prā.* (i.19) states that '*r*' is produced when the middle of the front of the tongue touches a point close to the teeth. The sound, thus produced is '*repha*' whose etymology is given as "*riphyate vipāṭyate vastrapāṭana dhvanivad uccāryate iti rephaḥ*" "It is called '*repha*' because it is pronounced like the sound of tearing or

ripping a piece of cloth". But the above etymology though popular, may be cancelled by the formative elements of 'repha'. Had 'repha' been a single word, there would have been no difficulty about the above etymology. But the *Taitt. Prā.* states that in 'repha' there are two elements viz.. 'r' and 'epha', the latter, being a substitute for 'kāra' added to each consonant. The purpose of coining 'epha' instead of *kāra* has been explicitly stated there.

However, the *Vaidikābharṇa* wants to point out that 'r' is a rolled sound, and therefore it should be regarded as dental. Thus according to all the *Prātiśākhya*s 'r' was either dental or alveolar, but according to the *Pāṇ. Śik.* it is cerebral.

15) "*Itulasā dantyā*" *Pāṇ. Ś.S.* 15; Candra.7; *Nyāsa*, part.1. p.58, 'l', 't', 'th', 'd', 'dh', 'n', 'l' and 's' are dentals. The word 'danta' denotes either the teeth or the rim of the teeth. 'l' is a mixed vowel, as it combines the features of vowel and consonant. There is difference of opinion on the place of articulation of 'l'. *Rk. Prā.* (i.18) regards it to be a velar sound *Vāj. Prā.* (i.65) takes it to be dental; *Ath. Prā.* (i.26) regards it as veolar; *Taitt. Pra.* (ii.18) regards it as alveolar and according to *Rk. Tantra* (4) it is not located. *l* (लृ) is said to be articulated by the two sides of the tongue (Max Müller on *Rk. Prā.* xiv-27).

16) "*vakāro dantoṣṭhyaḥ*" *Pāṇ. Ś.S.* 16; Candra 12, *Pāṇ. Śik.* 18 'v' is dentolabial. It's earlier pronunciation was bilabial (double 'v') but in course of time it changed into dento-labial. Beniel Jones in his 'Outlines of English Phonetics' (p.693) observes: "Indians generally replace 'v' by a center front tooth lightly and is so held as to allow the air to escape chiefly at the sides".

17) “*sṛkvasthānam eke*” Pāṇ. Ś.S.17; Candra (wanting)

According to some, ‘v’ is articulated at the corners of the mouth. ‘*sṛkva*’ in this sense occurs in the *Indische Studien*, *Kathāsaritsāgara* and *Suśruta*.

18) “*upūpadhmānīyā oṣṭhyāḥ*” Pāṇ. Ś.S.18; Candra 11. *Nyāsa*, part.1 p.58

‘u’ p, ph, b, bh, m, and the *upadhmānīya* fricative are labials. ‘*Oṣṭha*’ as a place of articulation occurs in the sound, in the singular, (*Rk.Tantra*.-9, ‘*u-veh-pa oṣṭhe*’) but as an articulator, it occurs in the dual (*Taitt.Prā.* ii. 39, *oṣṭhābhyām pavarge*)

19) “*anusvārayamā nāsikyāḥ*” Pāṇ. Ś.S.-19; Candra 8.

‘*nāsikānusvārasya*’ -- *anusvāra* and the *yamas* are nasals. Candra is silent about the *yamas*.

20) “*kaṇṭhanāsikyamanusvārameke*” Pāṇ. Ś.S.-20; Candra (wanting)

According to some *anusvāra* is glotto-nasal. The description of *anusvāra* as glotto-nasal limits its sphere of articulation. For, *anusvāra*, being an *ayogavāha* sound becomes homorganic with the letter on which it depends and in that capacity, it may be dento-nasal, or glotto-nasal or labio-nasal or palato-nasal or cerebro-nasal etc., according to its context. Better, it should be regarded as nasal.

21) “*yamāśca nāsikyajihvāmūliyā ekeṣām*” Pāṇ. Ś.S.-21; Candra (wanting)

According to some, the *yamas* are naso-velars.

22) “*edaitau kaṇṭhatālavayau*” Pāṇ. Ś.S.22; Candra 4; Nyāsa, part-I p.58.

‘e’ and ‘ai’ are glotto-palatals Candra in *sūtra*-10 also regards ‘i’ as glotto-palatal.

23) “*odautau kaṇṭhyoṣṭhyau*” Pāṇ. Ś.S.-23; Candra 5; Nyāsa, part-1 p.58.

‘o’ and ‘au’ are glotto-labials. Candra (in *sūtra*-11) also regards ‘u’ as glotto-labial.

24) “*ññṇmāḥ svasthāna nāsikāsthānāśca*” Pāṇ. Ś.S.-24; Candra.9 ‘ñ’ ñ, ṇ, n, and m, are nasals and are homorganic with their respective mute-series.

25) “*dvivarṇāni sandhyakṣarāṇi*” Pāṇ. Ś.S.-25; (*dve dve varṇe sandhyakṣarāṇāmārambhake bhavata iti*), Candra (wanting)

‘*Sandhyakṣara*’ denotes a compound vowel, a dipthong. ‘e, ai, o, au’ are dipthongs. The *Yāj. Śik.* (ii.2.20) says in ‘ai’ and ‘au’, the first morā is glottal and the second palatal or labial. As regards ‘e’ and ‘o’, the *Pāṇ.Śik.* (13) says; “in ‘e’ and ‘o’, the glottal element has a length of ½ mora and in ‘ai’ and ‘au’ 1-mora “. Although dipthongs are combinations of vowels, they are treated as single letters. (*Vāj.Prā* IV. 145).

26) “*sarepha ṛvarṇaḥ*” Pāṇ. Ś.S.-26; Candra (wanting) *r* is homorganic with ‘r’. The *Sarvasammata śik.* (19) observes;

ṛkārasya svarūpaṁ hi śliṣṭaṁ padacatuṣṭayam /

padeṣu teṣu vijñeyo nādavanto svarātmakam /

anu rephasya madhye tu vijñeyaṁ vyañjanātmakam //

The characteristic of 'ṛ' is that it is a compound of four segments; of these, the first and the last are vocalic, whilst the central two are consonantal. Regarding the method of combining the vocalic as well as the consonantal elements the commentator of the *Ath.Prā.* (i.37) observes;

“*yathāṅgulya nakhaṁ tathā sūtre maṇirivetyeke tṛṇe kṛmiriveti ca*”

The vocalic and the consonantal elements in 'ṛ' are combined like a nail on the finger, or a pearl on a string or a worm in the grass.

27) "*evam etāni sthānāni*" *Pāṇ. Ś.S.* (wanting); Candra (wanting)

Here ends the chapter dealing with the place of articulation.

I.10.ii. *Karaṇa prakaraṇa*

1. "*karaṇam api*" *Pāṇ. Ś.S.* (wanting) Candra-14

While, '*sthāna*' denotes the passive organ of articulation, '*karaṇa*' denotes the active organ of articulation. The '*sthāna*' is that which is approached and the *karaṇa*, that which approaches. The terms closely correspond to what Pike (Phonetics, p.120) calls 'point of articulation' and 'articulator' '*karaṇa*' always denotes an area of the tongue viz. root of the tongue (*jihvāmūla*), middle of the tongue (*jivāmadhya*), tip of the tongue (*jihvāgra*) etc. In the articulation of the labial sounds, the lower lip is the '*karaṇa*' and the upper lip is the '*sthāna*'. In the articulation of the glottal sounds, the lower part of the glottis is considered to be the *karaṇa*. Hence the articulation is infra-buccal. The articulation of the nasal sounds is however, a complicated affair. The complicacy is due to the fact that the nose by some authorities is described as '*sthāna*' while by some others, it is described as '*karaṇa*'.

2. "*jihvyatālavyam ūrdhanya dantyānām jihvā karaṇam*" Pāṇ. Ś.S.-1; Candra (wanting)

The tongue is the articulator of the velars, palatals, cerebrals and dentals.

3. "*katham iti?*" Pāṇ. Ś.S.(wanting), Candra(wanting)
 4. "*jihvām ūlena jihvyānām*" Pāṇ. Ś.S. 2. Candra (wanting) Pāṇini adds "*tad yeṣām abhyāsam*"

The velars are articulated by the 'root of the tongue'. The 'sthāna' of the velar series is the "*hanu mūla*" (root of the jaw, the soft palate).

5. "*jihvāmadhyena tālavyānām*" Pāṇ. Ś.S.-3; Candra. 17

The palatals are articulated by the middle of the tongue (cp. *Ath.Prā.*-1.21; *Vāj. Prā.*-i 79; *Taitt.Prā.*-ii.36).

6. "*jihvopāgreṇa mūrdhanyānām*" Pāṇ. Ś.S.-4; Candra.16.

The articulator of the cerebrals is the tip of the tongue retroflex or rolled back (*prativeṣṭita*) cp. (*Ath.Prā.* i.22; *Vāj.Prā.* i.78; *Taitt. Prā.* ii.37) '*upāgra*' denotes the part lying next to the tip or the under-side of the tip. Regarding the retroflex articulation of the ṭ-series J.R. Fifth observes:

"The Indian 'ṭ' is not made with the tip in the English manner, but with the very edge or rim of the tip, which is slightly curled back to make this possible"

(vide, Bulletin of the School of Oriental and African Studies, xii. 859).

7. “*jihvāgrādhaḥ karaṇam vā*” Pāṇ. Ś.S. 5; Candra (wanting)

Optionally, the bottom of the tip of the tongue is the articulator of the retroflex sounds.

8. “*jihvāgreṇa dantyānām*” Pāṇ. Ś.S. 6; Candra 15.

The tip of the tongue is the articulator of the dentals. In the articulation of the dentals, the tip of the tongue is thrust forward (*‘prastīrṇa’ Ath. Prā-i.24*). Excessive spreading of the tongue has been prohibited by the *Rk. Prā.* (xiv.21) in any of the mute-series.

9. “*śeṣah svasthānakaraṇah*” Pāṇ. Ś.S. (wanting) Candra 18

The rest have the same organ or organs as the place of articulation and articulator.

10. “*ityetat karaṇam*” Pāṇ. Ś.S.-7; Candra (wanting)

Here ends the chapter dealing with articulator.

I.10.iii. *Antaḥ-prayatnaprakaraṇa*

1. “*prayatno dvividhaḥ*” Pāṇ. Ś.S.-1; Candra 19.

Pāṇini adds ‘*api*’. ‘*prayatna*’ denotes the articulatory process. It is of two kinds.

2. “*ābhyantara bāhyaśca*” Pāṇ. Ś.S.-2.; Candra 19.

(1) intra-buccal and (2) extra-buccal

The *sūtra* (no.19) of Candra has been divided into two separate *sūtras* by Āpiśali and Pāṇini.

3. ‘*ābhyantarastāvat*’ Pāṇ. Ś.S.-3; Candra 20.

4. “*spṛṣṭakaraṇaḥ sparśaḥ*” Pāṇ. Ś.S.-4; Candra-27,

Candra (in *sūtra* 21) points out that the intra-buccal processes are of four kinds: (1) closure (2) openness (3) full contact and (4) slight contact. Neither *Āpiśali* nor Pāṇini enumerates these processes, but both deal with them in describing the *prayatna* of different sounds. This *sūtra* and succeeding two *sūtras* are quoted in the *Nyāsa* (Part.1.p.59). Patñjali observes:

“stops have full contact, semivowels have slight contact, fricatives have openness, (the adjective ‘slight’ should proceed) and vowels have openness (the adjective ‘slight’ should drop) *Mbh.* i.1.10”

cp. (i) Bhartṛhari’s *Mahābhāṣya Dīpikā*, p.183

(ii) Sṛṣṭidhara’s *Bhāṣā Vṛtti*, i, 1.9

5. “*Iṣatspṛṣṭakaraṇāḥ antaḥsthāḥ*” Pāṇ. Ś.S.-5; Candra. 28

The term ‘*antaḥstha*’ (literally standing between) may be interpreted as referring to the intermediate degree of contact. The ending as *stha*, ‘standing’ refers to the place between the stops and the fricatives. Plato distinguishes between ‘*phoneenta*’ (sonant) and ‘*aphona*’ (non-sonant), the distinction being phonological. Aristotle distinguishes between ‘*aneu-prosboles*’ (non-contact, skt. *asprṣṭa*) and ‘*meta-prosboles*’ (contact, skt. *spṛṣṭa*) the distinction being phonetic rather than phonological. Plato further mentions consonants having noise (*psophos*) and having no voice (*phthongos*). The latter he calls intermediate (*mesa*). Aristotle calls it ‘*semiphona*’, half-sonant and proceeds to define it by a combination of phonetic and phonological criteria.

The semivowels are still eminently spirants, fricatives and constrictives. The term 'semivowel' has its origin in the Greek 'semiphonon' through the medium of the Latin 'semivocalis' and its employment generally corresponds to Skt. 'antaḥstha'. Among the semivowels, 'r' and 'l' are called liquids. The term 'liquid' has its origin in the Greek (lit.moist) through the medium of the Latin 'liquidus'. The semivowels have slight contact.

6. "Iṣatvivṛtakaraṇā uṣmāṇah" Pāṇ. Ś.S.-6.; Candra 23

Pāṇini adds "vivṛtakaraṇā vā" Candra: "vivṛtatvaṁ svarāṇām uṣmāṇāṁ ca". It seems that Āpiśali is more correct than Pāṇini or Candra, for if 'vivṛtatva' (openness) is accepted for both vowels and fricatives, there is no means to distinguish between the articulatory processes of the vowels and the fricatives. Therefore, Pāṇini optionally regards them to be produced with *vivṛtatva* (openness). Slight contact and slight openness provide classificatory criteria for the semivowels and fricatives respectively.

The present observation regarding the articulatory process of the fricatives, finds an echo in the statements of western authorities such as Grammont (French phonetician), Sievers (German phonetician) and Pike. Grammont says that in pronouncing the retroflex fricative (s), "the tongue disposes itself in the form of a gutter and forms a canal very narrow" (Traite de phonetique, p.69). This is similar to the statement of the *Ath.Prā.*(i.23) that in pronouncing the retroflex fricative, the tongue assumes the form of a trough (*śakārasya droṇika*). Sievers in his "Grundriss der Phenetik" (Sec. 314) also makes a similar statement: "In the articulation of fricatives, the tongue in its equator, is indented to several small and deep canals" which is parallel to Pike's statement of

the grooved tongue for a sibilant (op.cit.p.121).

7. “vivṛtakaraṇāḥ svarāḥ” Pāṇ. Ś.S.-8; Candra 23

Patañjali derives the word ‘svara’ as *svāyam rājate* = autonomous (on Pāṇ.i.2.29-30). *Nārādī śik.*(Ś.S.p.361) compares the vowel to a powerful monarch and the consonant, to a weak king, the latter submitting to the force of the former. Consonant is like a pearl in a necklace, but the thread which supports it, is the vowel (Ś.S.p.361). For the vowels, ‘the place of articulation’ signifies the place to which approximation (*upasañhāra*) is made, and the ‘articulator’ refers to the organ which effects the approximation. For the rest, the place of articulation refers to the place where contact (*sparsana*) is made, and the ‘articulator’ refers to the organ which effects contact. For vowels, the articulator is open.

8. “tebhya ‘e’ ‘c’ vivṛtatarau” Pāṇ. Ś.S.(wanting); Candra-24

‘e’ and ‘c’ are more open than the vowels, cp. *Nyāsa*. Part.1.p.18; Padamañjarī Part.1.0.18.

9. “tābhyām ai au” Pāṇ. Ś.S.(wanting); Candra -25 ,

‘ai’ and ‘au’ are more open than ‘s’ and ‘c’. Candra adds: ‘tābhyāmapyakārah’ ‘a’ is more open than ‘ai’ and ‘au’. This *sūtra* has been left out by *Āpiśali* and Pāṇini, but it occurs in the *Nyāsa* (Part 1.p.8).

10. “saṁvṛtastvakārah” Pāṇ. Ś.S.-9; Candra- 22

‘a’ is produced with closure or contraction.

11. “ityeṣo’ntaḥ prayatnaḥ” Pāṇ. Ś.S.-10; Candra (wanting)

Here ends the chapter dealing with intra-buccal processes.

I.10.iv. *Bāhyaprayatna prakaraṇa*

1. “*atha bāhyāḥ prayatnāḥ*” *Pāṇ. Ś.S.-1*; Candra -29

And then begin the extra-buccal processes.

2. “*vargāṇāṃ prathamadvitīyāḥ śaśasavisarjanīyajihvāmūlīyo-
padhmānīyā yamau ca prathamadvitīyau vivṛtakaṇṭhāḥ
śvāsānupradānā-ścāghoṣāḥ*” *Pāṇ. Ś.S.-2*; Candra 30.

Candra omits ‘*yamau ca prathamadvitīyau*’. The first two letters in each mute-series, (i.e., ‘*k kh, c ch, ṭ ṭh, t th, p ph*’, ‘*ś ṣ s*’ the *visarjanīya, jihvāmūlīya, upadhmānīya*, and the first two *yamas* (i.e., the long and short *anusvāras*) these eighteen letters are produced with the openness of the glottis, emission of breath and nonvoice. *sūtras* 2-7 of *Āpiśali*, have been quoted in the *Nyāsa* (part.1.p.57) with slight variation. For instance, in *sūtra*-1, there occurs ‘*tatra vargāṇām*’ instead of ‘*vargāṇām*’; in *sūtras*-3, 5, ‘*vargyayamāṇām*’ instead of ‘*vargayamāṇām*’. cp. Padamañjarī (part-1.p.59) *Mahābhāṣya* i.1.9 “*tatra vargāṇām madhiko guṇāḥ*”

The term ‘*anupradāna*’ (lit. after-effect) denotes secondary features which according to the *Śik. Prakāśa* are nasality, breath, voice etc. Whitney (*Taitt.Prā.* xxiii.2) translates this as ‘omission’ and Weber as “Ausstossung” (*Ind. Stud.* iv.p.107). Varma (op.cit.p.3) translates it as ‘sound-material’. From the etymology of the word, the author of the *Śik.Prakāśa* seems to have given a more appropriate interpretation than the rest.

- 3 & 5. *vargāṇāṃ prathamō alpaprāṇa itare sarve mahāprāṇāḥ*

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varga-yamāṇām tṛtīyā antaḥsthaścālpaprāṇā itare sarve mahāprāṇāḥ.
/Pāṇ. Ś.S.-3,5; Candra 31, 32

The first, third and the fifth letters of each mute-series; (i.e., *k g ṇ, c, j, ñ, t, d, n, ṭ, ḍ, ṇ, p, b, m*) the semivowels (i.e., *yrlv*); the first and third *yamas* (i.e., the short *anusvāra* and *anunāsika*) are unaspirate sounds (*alpaprāṇa*, lit. little breath). The rest (*kh, gh, ch, jh, th, dh, ṭh, ḍh, ph bh, ś ṣ s h, visarjanīya, jihvāmūlīya, upadhmānīya, anusvāra*, the second and the fourth *yamas* (long *anusvāra* and *!*) are aspirate sounds (*mahāprāṇa*, lit. big breath). Candra, being a Buddhist does not include the *yamas* either among aspirate or unaspirate sounds.

4. "*vargāṇām tṛtiyacaturthā antaḥsthā hakārāṇusvārau yamau ca tṛtiyacaturthau sarivṛtakaṇṭhā nādānupradānā ghoṣavantaśca*" Pāṇ. Ś.S.-4; Candra-33

The third and the fourth letters in each mute-series (*g gh, j jh, d dh, ḍ, ḍh, b bh*); the semivowels; *h*; *anusvāra*; the third and the fourth *yamas* (*anunāsika* and *!*) are produced with the contraction of the glottis, emission of voice and with the soft articulation called '*ghoṣa*'. The difference between '*śvāsa*' and '*nāda*' has been pointed out by most of the *Prātiśākhya*s and the *Pāṇ. Śik.* The *Rk.Prā.* (xii.1.2) observes:

"The air, respiration or pulmonic emission, at times of vocal activity, becomes '*śvāsa*' (breath) or '*nāda*' (voice) according as the glottis is open or closed"

6. "*yathā tṛtīyastathā pañcamah*" Pāṇ. Ś.S.-6; Candra- 33.

Like the third letters of the mute-series, the fifth letters are also produced with the contraction of the glottis, emission of voice and with

soft articulation (*ghoṣa*)

7. “*anunāsikyam eṣām adhiko guṇah*” *Pāṇ. Ś.S.-7* Candra (wanting)

Nasality is the extra quality of the nasal consonants which are articulated both in the buccal cavity as well as the nose.

8. “*śādaya uṣmāṇah*” *Pāṇ. Ś.S.-8*; Candra (wanting)

‘ś ṣ s and h’ are fricatives as well as aspirates.

9. “*sasthānena dvitīyāḥ*” *Pāṇ. Ś.S.-9*; Candra (wanting)

The second letters in the mute-series are aspirates resembling ‘s’.

10. “*hakareṇa caturthāḥ*” *Pāṇ. Ś.S.-10*; Candra (wanting)

The fourth letters in the mute-series are aspirates resembling ‘h’.

11. Semivowle (except ‘r’) are of two kinds:

(1) *sānunāsika* and (2) *niranunāsika*, *Pāṇ. Ś.S.-8*; Candra- 50.

12&13. ‘r’ and the fricatives have no ‘*savarṇa*’ letters. Two or more letters are called ‘*savarṇa*’ when they belong to the same class of sounds. *Pāṇ. Ś.S.-9-10*; Candra (wanting) cp. *Mahābhāṣya Dīpikā*, p.184.

I.10.v. *Vṛttikāra prakaraṇa*

1 & 2. The commentators state: *Pāṇ. Ś.S.VI-1*; Candra 38-39 ‘a’ has eighteen divisions; (1) *hrasva*, *dīrgha*, *pluta*, *udātta*, *anudātta*, *svarita sānunāsika*, *niranunāsika* = 18

3. So are *i u* etc. *Pāṇ. Ś.S.-2*; Candra 40.

4 & 5. 'I' is not long (*dīrgha*); hence it has twelve divisions. *Pāṇ. Ś.S.*-3-4; Candra 41.

6. Some *Śākhās* accept the long 'I'; e.g. *Kṛpaka*. In those *Śākhās* 'I' has eighteen divisions. *Pāṇ. Ś.S.*-5: Candra (wanting)

7 & 8. The diphthongs are not short (*hrasva*); hence, they have twelve divisions. *Pāṇ. Ś.S.*-6-7; Candra 42.

9 & 10. The Satyamugri and the Rāṇāyaṇīya schools of the *Sāmaveda* recognise the short (*hrasva*) diphthongs; hence in these schools, diphthongs have eighteen divisions *Pāṇ. Ś.S.*(wanting) Candra (wanting) cp. *Mahābhāṣya* i.1.47.

CHAPTER-II

A

SURVEY OF THE ŚIKṢĀS OF ṚV, SV, & AV

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II.1.0 Śikṣās of the Rgveda (RV)

Besides general śikṣās, it is essential to have some ideas about śikṣās of other Vedas. In the śikṣās of RV, the Śaiśirīyaśikṣā, the Vyādiśikṣā, the Svaravyaṅjanaśikṣā are the significant ones. The most important of Rgvedic śikṣā literature is the Śaiśirīyaśikṣā.

II.1.(i) Śaiśirīya śikṣā

It has been edited by T.P. Chowdhury and published in the Journal of Vedic studies. Its date and authorship are not known. It is attributed to śaiśira, one of the five important disciples of Śaunka, viz., Mudgala, Gālava, Gārgya, Śākalya and Śaiśira. It is concerned with the Śaiśirīya śākhā of the RV, with which the Rk. Prāt. is also concerned. It contains altogether 180 verses, written mostly in the *anuṣṭubh* metre. Nowhere it quotes the Rk. Prāt. Hence it is difficult to determine which of these two works, was earlier. Most of its verses resemble those of the Pān, Śik. For illustration of its rules, it quotes stanzas from the RV. Some of its original contributions to phonetics are:-

- i) It specifies the places where the lips should be twice separated¹ and where they should be once² separated. In *su ūtaye* (RV. VIII.47. 1-18) *bhrātuḥ putrān* (RV. X.55.1), *dhenurī somah* (RV. 1.91.20) *pra suṣṭuti* (RV. 42.14) *yanmayobhū* etc. the lips should be twice separated. In

1. *dviroṣṭhau tu vigṛhṇīyāt* (One should hold apart the letters containing two labial sounds)

2. *sakṛdoṣṭhau vigṛhṇīyāt* (One should hold apart the same having one labial sound)

‘yuyotu yuyuvir’ (RV.V. 50.3) the lips should be once separated i.e. ‘yuyotu’ and ‘yuyuvir’ should be pronounced as ‘yotu’ and ‘yuvir’ respectively, with the elision of ‘y’. This tendency of dropping one of the two consecutive labials can be traced in M.I.L.

- ii) It deals with two extra varieties of *piṇḍa*, viz., r + r, designated as ‘*vartivartula*’ (round like the wick) and r+y, designated as ‘*yoktrabandha*’³ (binding by a rope) e.g.

a) *niṛṛtya* (RV. X.186.1)

b) *supitrya* (RV. X.115.6)

Just as the carrier wraps the grass by a rope and binds, likewise the Vedic *piṇḍa* (junction) should be uttered, being wrapped and bound by the *yakāra*.

- (iii) It assigns four or six morās to *praṇava* and acclaims that “He who knows it ought to be unbroken like a stream of oil and it's sound coming from below resembling the long continuous sound of the bells, is, as it were, an esoteric scholar of the Vedas”⁴
- (iv) In the enumeration of letters, it includes la (ल), *nāsikya* (h+nasal) and *raṅga*, instead of the *jihvāmūlīya*, *upadhmānīya* and the pluta l (ॐ). The intervocalic ‘*ḍa*’ and ‘*ḍha*’ are designated as *duḥsprṛṣṭa* (difficult to utter)
- (v) It has independent view on the vowel quantity of the *anusvāra*. “After a short vowel, the *anusvāra* as well as the short vowel

3. *yathā yoktreṇa sariveṣṭya tṛṇān badhnāti vāhakaḥ /
evam veṣṭya yakāreṇa vaidikam piṇḍamucyate //*

4. *tailadhārāmivācchinnam divghghanṭaninādavat /
vijñeyam praṇavsyāgram yastam veda sa vedavit //* Saiśirīya śikṣā

has only 3/4 of a morā, but after a long vowel, *anusvāra* has, 1/4 of a mora and the long vowel has 1 and 1/4 morās”

- (vi) In the junction between two mutes, the first one is ‘*saṁdḥṛta*’ (restrained), not ‘*śruta*’ (heard); because the first mute in the letter- junction is produced along with some faint vibration in the mouth cavity.
- (vii) In the junction between a penultimate ‘h’ and ‘n’, ‘n’ should be sounded prior to ‘h’. This may be compared to metathesis in modern philology. The same rule also applies to the junction ‘s + n’. Metathesis in the junction ‘h+n’, is still found in M.I.L.
- (viii) *anudātta* is designated as ‘*svara*’ and *udātta*, as *nāda*. It is a fairly complete *śikṣā*, discussing almost all the phonetic topics to be met with in other *śikṣās*.

II.1.(ii) *Vyāḍi śikṣā*

Vyāḍi, as a teacher of phonetics is mentioned in the *Rk.Prāt* (iii.23). His name also comes in the *Mahābhāṣya*, as the author of a grammatical work consisting of a hundred thousand verses called the *saṁgraha*.⁵ His patronym was Dakṣāyaṇa and for this reason he is supposed to be a relative of Pāṇini or Dākṣiputra.⁶ He is the first known teacher to have taught the various fictitious recitations of the Vedas which are described in the *Vikṛtivallī* edited by Satyavrata Samaśramī with a commentary by Gangādhara Bhattācharya. Other treatises on the subject have been composed at a much later date.

5. *sangrahe etat prādhānyena parikṛttitam, Mahābhāṣya*, i.1.1

6. Gold-stüker on Pāṇini, Pp. 209-11

Among these, the *Jaṭāpātala* by Thibaut,⁷ and the *Aṣṭavikṛtivyṭti* by Yati Madhusudana⁸ with a Bengali commentary, deserve special mention.

The *vyāḍi śikṣā* has been published in the Mysore Journal, edited by Keshav Sivaghanapathin (Bangalore). This *śikṣā* is admittedly not the original *vyāḍi śikṣā*, for the author says that he has composed it after consulting the following works:

- 1) *Rk. Prāt* with the commentary of *uvāṭa* and *pārśada vṛtti*.
- 2) *Jaṭālakṣaṇa* by Narasimha
- 3) *Jaṭāparibhāṣā*
- 4) *Vikṛtivallī*
- 5) *Aitareyāraṇyaka*
- 6) *Upalekha*
- 7) *Vikṛtti Kaumudī*
- 8) *Caraṇa Vyūha Pariśiṣṭa*
- 9) *Jayanta Kārikā*
- 10) *Svaraśiromaṇī*
- 11) *Svarāṅkuśa śikṣā*
- (12) *Varṇa krama śikṣā*

The *Prāt. Pra. Śik.* in its last section, also deals with the varieties of fictitious recitation.⁹ The *Vyāḍi śikṣā* deals with the following subjects:

- (1) *jaṭādi vikāra*, (2) *jaṭāprapāna krama*, (3) *jaṭāgatakrama*

7. *Das Jaṭāpātala* : herous gigegeben ubersetzet und mit Anmerkungen versehen von G. Thibaut, Leipzig, 1870.

8. Ed. by Prof. Madhavadasa Sankhya Tirtha, Calcutta-1939.

9. For illustrations of the various *vikṛti-pāṭhas* vide appendix to Satvalekar's edition of the *Rgveda Samhitā*.

sarñjñā, (4) *śuddhā trikrama jaṭā*, (5) *anusvāarakāra trikramādi*, (6) *vilomasamdhou vyākaraṇapramāṇa*, (7) *ṣatvādiṣu vyutkrama jaṭā*, (8) *okārasya aukāraprāptau jaṭā*, (9) *trikramādiṣu madhyagatatapādānām āvartanam*, (10) *ananupūrvīsaṁhitāyām jaṭā*, (11) *pragṛhya okārāntapadānām jaṭā*, (12) *tryakṣarāntapragṛhyānām jaṭā*, (13) *pragrahe ukārasya vakārādeśatvam*, (14) *kvacit ādeśalopaḥ*, (15) *pararūpa pradarśanam*, (16) *sāmyādigaṇānteṣu jaṭā*, (17) *plutiṣu jaṭā*, (18) *vilome' pi saptasvaritavidhānam*, (19) *svarita svarāṇām nāmāni*, (20) *kampavidhiḥ*, (21) *kampeṣu mātrākālah*, (22) *kampanimittāni*, (23) *mālādivikṛtiḥ*.

II.1. (iii) *Svara vyañjana śikṣā*

It is a short treatise of about three pages. The object of the work is to show when 'r' is a consonant and when it is a vowel. The work follows the *Rk.Prāt.* For it quotes in full two verses¹⁰ from the latter. It also uses throughout the terminology of *Rk. Prāt.*, such as various terms of *sandhi*, *niyata*, *bhugna*, *kṣaipra* etc. (*Rk.Prāt.* II.3). The work is post-Pāṇinian as it quotes Pāṇini.¹¹ The treatise is divided into six sections:

The first section points out cases in which 'r' of 'ri' is a consonant. In the various phases of *riphita sandhi* in which *visarga* may either be traced to 'r' or can be changed to 'r' (*Rk.Prāt.* IV.9). The 'r' is a consonant e.g. "*prātarindram*" where 'r' of the syllable 'ri' is a consonant. It will also be a consonant in "*paripanna sandhi*" (*Rk.Prāt.* IV. 5) where 'm' is changed into *anusvāra* before 'r' or a spirant. e.g. *hotāraṁ ratnadhātamaṁ* (*RV.* I.i.1) where 'r' following *anusvāra* is a consonant.

10. *Rk. Prāt.* iv. 8-9

11. *Rk. Prāt.* vii. 4.28 and vi. 1.168

The *sandhi* in which 'r' is pronounced with roll in the throat is *riphita* and the *sandhi* changing 'm' into *anusvāra* is known as *paripanna sandhi*. On the other hand, 'r' as a vowel cannot allow an *anusvāra* before it. e.g. *saṃṛtubhiḥ*. 'r' is also a consonant before 'y'.¹² The treatise in the third section quotes Pāṇini¹³ according to which the final 'r' of a verb is changed into 'ri' before y.

'r' in various forms of the numeral 'tri' is a consonant except in *tṛtīya* and *tisṛ*. The *śikṣā* also enumerates a list of words in which 'r' is a consonant and in which it is likely to be confused with 'ṛ' as *ripu*, *krivi krimi*, *riśādas* etc.

The second section specifies cases in which 'ṛ' is clearly a vowel- viz. after an initial group of consonants or before a consonant group, of which the last is the penultimate sound of the stem.¹⁴ The *śikṣā* mentions a couple of negative conditions, which are necessary for 'ṛ' being a vowel:

- (i) 'r' should not be preceded by a *visarga* that cannot be changed into a hissing fricative.
- (ii) It should not be preceded by an *anusvāra*, as already mentioned above. But it states that a hiatus or a semivowel may precede it.

Section-iii enumerates some further details of cases in which 'r' is a consonant. Thus 'r' in '*martya*, *marda*, *reṣaṇa* and *riṣe*' is a consonant

12. *yakāre ca riśoktau ca*

13. vii. 4.28

14. *vikrame nāpyanusvāraḥ rkāraḥ sa sphuṭaḥ svaraḥ*
saṃyogācca paraḥ pūrvāḥ saṃyoge vyañjanopadhaḥ// Section-ii

and so is the 'r' in 'bhriyanta' and the author quotes Pāṇini¹⁵ in this connection. In conclusion, the Śikṣā makes an interesting observation that 'r' both in 'ṛ' and 'r', when not preceded by any consonant and when followed by a consonant is a concentrated 'r' (*saṁcito rephaḥ*).

Thus 'r' in 'ṛṣak', 'trita' and 'riśādas', 'ṛju' and 'ṛṇjaśe' is a doubtful consonant (*saṁdigdha vyañjana*) and the author calls it concentrated 'r'. According to the author's theory, 'ṛ' in the word 'saṁskṛta', preceded as it is by a consonant-group is a clear vowel ṛ, but 'r' in 'ṛju and ṛṇjaśe' is a concentrated r.¹⁶

II.2.0 Śikṣās of the AV

II.2.(i) Māṇḍukī Śikṣā

It has been described by Prof. Haug and by Prof. Weber in the appendix to his essay on the *Pratijñā Sūtra*.¹⁷ It has been critically edited by Pandit Bhagavad Datta.¹⁸ In the treatment of subject matter it resembles the *Yāj. Śik.* and the *Nār. Śik.* It is related to the AV, for it contains a large number of quotations from that veda, which Pandit Bhagavad Datta has collected in his index. The name 'Māṇḍūkā' occurs twice¹⁹ in the body of this treatise, and is widely known in the vedic literature.²⁰ This śikṣā

15. *Aṣṭādhyāyī*, viii. 4.28

16. *ṛjuriṇjaseriti cātha ityabhyāśasandigdham.....ṛṇāni ririgiti samcito rephaḥ, ṛṣak trita iti samcito rephaḥ; riṣyaḥ riśādasa iti samcito rephaḥ*, Section-iii

17. Über ein zum weissen yajus gehoriges phonetisches compendium, *das Pratijñāsūtra*, p. 106. &

Abh and lunge der konigohen Akademy der wissenschaft zu Berlin (1871)

18. Lahore (1921)

19. "trayo madhyā nivartante maṇḍūkasya mataṁ yathā" *Maṇḍu. Śik.* ii.3.

"maṇḍūkena kṛtāṁ śikṣāṁ viduṣāṁ buddhidīpanīm" *Ibid*, Xvi. 16

20. cp. (i) 'dhak ca māṇḍūkā' (Pāṇ. iv. 1. 119)

(ii) 'iti ha smāha hrasvo māṇḍūkeyaḥ' (Aita. Ārn. Iii. 1.5)

(iii) 'māṇḍūkeyasya sarveṣu praśliṣṭeṣu tathā smaret' (*Ṛk. Prāt.* iii.14)

(iv) 'māṇḍūkeyaṁ tarpayāmi' *Atharva pariśista*. III. 4.46

consists of sixteen chapters and deals with all the important phonetic topics elaborately.

It is particularly interested in accent common to all the Vedas and seems to have further developed the teachings of *Nār. Śik.* on accent. It says that manual gestures are invariably necessary in *Rk. Yajus* and *sama* recitations.²¹ According to this *śikṣā*, the first two and last two notes of the musical scale are sung in the vedas.²² In several places it has closely followed the *Nārādī* and the *Yāj. Śik.* which Bhagavad Datta has shown in his foot notes.

As regards its date, Verma is of opinion that it is later than the *Nār. Śik.* For it contains a good deal of material common to some of the *śikṣās* of the white *Yajurveda*- e.g. pronunciation of 'y' and 'v' in different positions,²³ the reference to the woman of *saurāṣṭra* pronouncing the *raṅga* vowel²⁴ etc. Therefore, it is either contemporary with or posterior to the *Yāj. Śik.*, of 10th century A.D.²⁵

II.2.(ii) *Dantyoṣṭhyavidhiḥ*

This is a phonetic treatise belonging to the *AV*. It has been critically edited by Pandit Ramagopala Sastri.²⁶ The word should, in fact be *Dantyoṣṭhyavidhi* but the *Caraṇavyūha* (*Atharvaveda Pariśiṣṭa* 49.4.8) and all the manuscripts of the text read it, however, as *Dantyoṣṭhyavidhi*. After paying homage to the venerable *Atharvan*, the author in the 2nd

21. *hastahānam.....rgyjuṣṣāmabhir dagdhe* etc. *Māṇḍ. Śik.* III. 3

22. *prathamavantimau caiva vartante chandasi svarah/ trayo madhye nivartante māṇḍūkasya matam yathā//* verse 17

23. *Māṇḍ. Śik.* viii.6-7

24. *Māṇḍ. Śik.* x.9

25. S. Varma, *Critical Studies in the Phonetic Observations of Indian Grammarians*, p.52

26. Lahore (1921)

verse points out that scholars are always left in doubt while determining whether 'b' is dental or labial (*chandasyadhyayaṇe prāpte viduṣāmātha dhīmatāṁ, bakāre saṁśayo nityam auṣṭhyam dantyamiti sma ha*). Therefore, the author has attempted to fix the places where 'b' is to be pronounced as labial.

- (i) It is labial when followed by the letter 'bh' in a word without 'avagraha' e.g. *bibhīṭah* (AV. II.15.1) *bibhratīḥ* (AV. III.14.3) etc.
- (ii) The following words, being accented on the first syllable are labials. e.g. *bala* (AV. I.35.3), *bāṇaḥ* (AV. VI.105.2) *bepaya* (AV. XII.3.13)
- (iii) The following words in all cases (*vibhakti*) are labials: *baladā* (AV. IV.2.5), *abalānugra* (AV. III.19.7), *abaladhanvā* (AV. III.19.7) *balāsam* (AV. V.22.11) and *bāhu* (AV. IV.2.5).
- (iv) The following words have the second 'b' as labial : *vaibādha* (AV. III.6.2), *devabandhum* (AV. IV.1.7) *vibaddhaḥ* (AV. V.20.2), *vibandhuṣu* (AV. XVIII.2.57) and *vibabādhe* (AV. VIII.9.6.)
- (v) The following words, accented on the first syllable are labials e.g. *alābu* (AV. VIII.14.14), *bājaḥ* (AV. VIII.6.3) and *bāṇa* (AV. X.2.17).
- (vi) *Brahma* (AV. I.10.4) in all its connotations is labial.
- (vii) *Chubukāt* (AV. II.33.1), *baskaye* (AV. IX.14.6), *bayaḥ* (AV. XX.129.15) etc., are labials when they occur at the end of a sentence.

(viii) The conjugational forms of *bibheda* (AV. IX.14.6); *bibhiduḥ* (AV. XX.77.6) etc. are labials.

(ix) *bale* (AV. II.29.1) is labial and so on.

II.3.0 Śikṣās of Sāmaveda

II.3.(i) Nārādī śikṣā

The *Nār. Śik.* is one of the oldest and the most profound śikṣās. The author says “I shall explain the nature of accents employed in the *Sāmaveda* in this short but comprehensive treatise”.²⁷ The author regards his work as the foremost *vedāṅga* which deserves the attention of scholars in the field of Vedic studies. Besides the treatment of musical accents, it also deals with general phonetic subjects such as doubling syllabication, varieties of the circumflex accent, *yama*, nasalisation etc. As regards the chronology of the treatise exact details are unknown, except its authorship which has been attributed to Nārada.²⁸ Therefore its date should be fixed from external evidence. The *Saṁgīta Ratnākara*, a treatise on music, quotes the authority of Nārada on the *gāndhāra grāma* which has been dealt with in the *Nār. Śik.* The *Saṁgīta Ratnākara* also states the opinion of Nārada on the musical modulations which have been described by the *Nār. Śik.* It is probable therefore, that the author of the *Saṁgīta Ratnākara*, here refers to the *Nār. Śik.* The probable date of the *Saṁgīta Ratnākara*, is the thirteen century A.D. The above data indicate that the *Nār. Śik.* was written earlier than the *Saṁgīta Ratnākara*.

Further, the *Nār. Śik.* quotes authorities such as Tumburu, Vāsiṣṭha

27. *sāmaveda tu vakṣāmi svarāṇāṁ caritaṁ yathā/
alpagranthaṁ prabhūtarthaṁ śravyaṁ vedāṅgamuttamam*// *Nār. śik.*, I.2.i

28. *tāna-rāga-svara-grāma-mūrcchanānāṁ ta lakṣaṇam/
pavitraṁ pāvanam paṇyam naradena prakṛtitam*// *Nār. śik.*, I.2.ii

and Visvāvasu to state that they too, had difficulty about the nature of accentuation in the *Sāmaveda*. The names of these teachers are also mentioned in the *Taitt. Prāt.* and the *Mbh.* Hence it should be posterior to these two works. The *Nār. Śik.* has been accompanied by a commentary named '*Śikṣāvivarāṇa*' written by Bhatta Bhaskara. This commentary is of little use because, instead of throwing some light on the subject it actually makes it more obscure.

II.3.(ii) Contribution to the study of music

Among all the *śikṣās*, the *Nār. Śik.* is singularly important for its contribution to music. Some description of its seven musical notes is found in the *Māṇḍ. śikṣā* where the description being incidental to that of the three main accents appears to have been borrowed from the *Nār. Śik.* A few observations of this *śikṣā* on music are:

The knowledge of *tāna* (tone), *rāga* (mode), *svara* (note), *grāma* (gamut) and *mūrchanā* (cadence), is sacred and purificatory. There are seven kinds of "*svara*", twenty-one kinds of "*mūrchanā*" and forty-nine kinds of "*tāna*". This may be regarded as a brief and exhaustive account of the different constituents of music.

The seven kinds of "*svaras*" are: (1) *ṣaḍja*, (2) *ṛṣabha*, (3) *gāndhāra*, (4) *madhyama*, (5) *pañcama*, (6) *dhaivata*, (7) and *niṣāda*. The three kinds of *grāma* are : (1) *ṣaḍja* (2) *madhyama*, and (3) *gāndhāra*; '*ṣaḍja*' is born from the earth; '*madhyama*', from the atmosphere and '*gāndhāra*' from heaven. The *grāma* modes depend upon *svara*-modes and change accordingly. Twenty tones are dependent on the '*madhyama grāma*', fourteen on the '*ṣaḍja grāma*' and fifteen on the '*gāndhāra grāma*'. The seven *mūrchanās* belonging to the gods are:

- 1) *nandī* 2) *viśālā*
- 3) *sumukhī* 4) *citrā*
- 5) *citravatī* 6) *sukhā*
- 7) *balā*.

The seven *mūrchanās*, which belong to the manes are:

- 1) *āpyāyinī* 2) *viśvabhṛtā*
- 3) *candrā* 4) *hemā*
- 5) *kapardinī* 6) *maitrī*
- 7) *bārhatī*

The seven *mūrchanās*, which belong to the seers are:

- | | | |
|------------------------|----------|-------------------|
| 1) <i>uttaramandrā</i> | produced | from <i>ṣaḍja</i> |
| 2) <i>abhirudgatā</i> | „ | <i>ṛṣabha</i> |
| 3) <i>aśvagrāntā</i> | „ | <i>gāndhāra</i> |
| 4) <i>sauvīrā</i> | „ | <i>madhyamā</i> |
| 5) <i>hṛṣyakā</i> | „ | <i>pañcamā</i> |
| 6) <i>uttarāyatā</i> | „ | <i>dhaivata</i> |
| 7) <i>rajanī</i> | „ | <i>niṣāda</i> |

The meaning of these terms in the present context, has not been explained either by the author or by the commentator of *Nār. Śik.*

Gandharvas are fond of the seven *mūrchanās* belonging to the gods; *yakṣas* are fond of those belonging to the fathers and men are fond of the seven *mūrchanās* belonging to the seers. The *ṣaḍja* pleases the gods, *ṛṣabha* the seers, *gāndhāra* the fathers, '*madhyama*', the *gandharvas*, '*pañcamā*', the gods, seers and the fathers; '*niṣāda*', the *yakṣas* and '*dhaivata*' pleases other beings.

'*Niṣāda*' rising from '*ṛṣabha*', obstructed by '*ṣaḍja*', accompanied by '*dhaivata*' and '*pañcamā*', and falling into '*madhyama*' is called

'sandava'. The exact meaning of 'sandava' has not been explained by the commentator who merely says that 'sandava' is so called because of the absence of 'gāndhāra'. *Pañcama* being obstructed by 'gāndhāra' accompanied by 'ṛṣabha' and 'niṣāda' and falling into 'madhyama' has also been designated as 'sandava'. 'Madhyama' is so called due to the predominance of 'gāndhāra', due to the constant repetition of 'niṣāda' and due to the weakness (comm.. 'sakrt uccāraṇa') of 'dhaivata'. The 'madhyama grāma' is produced when in *ṣaḍja* and *ṛṣabha*, the remaining five musical notes take refuge. In 'ṣaḍja grāma', the 'niṣāda' is pronounced with slight contact of the articulator, the 'gāndhāra', with excessive contact and the 'dhaivata' with tremor. When the 'niṣāda' consisting of four śrutis occurs in *ṣaḍja*, the intervening soft sound depending on *pañcama* is called *kaiśika*. The 'kaiśika madhyama' is a particular *grāma* mode; so called because *kaiśika* is joined with all notes starting from 'madhyama'. The soft and melodious note rising from the constant repetitions of "*pañcama*" is called 'kaiśika' by Kaśyapa. The *Nār. Śik*, derives 'gāndhāra' from 'Gandharva' with the nominal suffix 'ā'; 'gā' indicates vocal music; 'dhā', the art of music and 'rā' indicates instrumental music. Thus the word 'gāndhāra' exits love for music.

The *Nār. Śik*, gives the etymology of the seven musical notes :

- (i) The 'ṣaḍja' is so called because it is produced through the six vocal organs, viz. 1) nose, 2) glottis, 3) lungs, 4) palate, 5) tongue and teeth. It is the sound of the peacock.
- (ii) The 'ṛṣabha' is so called because it resembles the bellowing sound of the bull.
- (iii) The 'gāndhāra' is so called because, in it's mode of

articulation, it brings fragrance to the nose. It is the sound of the goat.

- (iv) The '*madhyama*' is so called because, in its mode of articulation, air is transformed into a deep sound (*mahānāda*) while reaching back the navel. It is the sound of the curlew or osprey.
- (v) The '*pañcama*' is so called because, five vocal organs are involved in its mode of articulation, viz. 1) navel, 2) lungs, 3) heart, 4) glottis, and 5) head. It is the sound of cuckoo.
- (vi) The '*dhaivata*' is so called because it suffers increase due to singing in high pitch in the *pañcama* coming between *ṣaḍja* and *madhyama*, (comm.. *ṣaḍjamadhyagatasya pañcamasthoccagītvāt*) and decrease in cadence, according to the gamut, like the moon increasing in the bright fortnight and decreasing in the dark. It is the sound of the frog.
- (vii) The '*niṣāda*' is so called because it affords shelter to other musical notes. Like the sun outshining stars in day-time, the '*niṣāda*' outshines the remaining musical notes. It is the sound of the elephant.

Except '*dhaivata* and *niṣāda*', each of the remaining five notes, has contact with five vocal organs; the '*niṣāda*' contacts all the organs of articulation and the '*dhaivata*' though rising from the forehead, has contact with all the vocal organs. On the place of articulation of the seven notes, the *Nār. Śik.* further observes:-

The “*ṣaḍja*” rises from the glottis, the ‘*ṛṣabha*’, from the head, the ‘*gāndhāra*’, from the nose, the ‘*madhyama*’, from the ‘lungs, head and the glottis’, the ‘*dhaivata*’ from the forehead and the ‘*niṣāda*’ from all the vocal organs. The *Nār. Śik.* identifies the seven notes with the sounds of different fauna. The peacock utters ‘*ṣaḍja*’, the cow utters ‘*ṛṣabha*’ the goat (or lamb) utters ‘*gāndhāra*’ the curlew (woodcock) utters ‘*madhyama*’, the cuckoo utters ‘*pañcama*’ (at the vernal season; the horse (or frog) utters ‘*dhaivata*’ and the elephant utters ‘*niṣāda*’.

The *Nār. Śik.* identifies the notes of the *sāma*-chanters with those of the flute : The *prathama*, *dvītiya*, *tṛtiya*, *caturtha*, *pañcama*, *ṣaṣṭha* and *saptama* notes of the *sāma*-chanters are respectively identified with the *madhyama*, *gāndhāra*, *ṛṣabha*, *ṣaḍja*, *dhaivata*, *niṣāda* and *pañcama* notes of the flute.

It gives an interesting etymology of the word ‘*gāndhāra*’ “*gām dhārayati sannihitam karotīti gāndhāraḥ*”. It is called ‘*gāndhāra*’ because it brings the cow to the spot. In this context, it states that even the wish-yielding *kāmadhenu* is attracted by the *gāndhāra* note. It gives the names of different gods singing different notes; ‘*ṣaḍja*’ is sung by Agni; ‘*ṛṣabha*’ by Brahmā; ‘*gāndhāra*’ by Soma; ‘*madhyama*’ by Viṣṇu; ‘*pañcama*’ by Nārada and both *dhaivata* and *niṣāda*, by Tumburu.

The *Nār. Śik.* speaks of two kinds of lute:

- (1) the bodily lute (*gātra vīṇā*) and
- (2) the wooden lute (*dāravīṇā*).

The mode of *sāma*-chanting should resemble the flight of the falcon in the sky. The movement of ‘*śruti*’ inside ‘*svara*’ has been compared to the movement of a fish inside water. The ‘*śruti*’ is latent in ‘*svara*’ in the

same way as the ghee is in curd, or the fire, in wood. And just as some amount of effort is necessary to produce either ghee or fire likewise, 'śruti' is produced with effort, from 'svara'.

The *Nār.Śik.* states six merits and six demerits of 'karṣaṇa' (dragging). The six merits of 'karṣaṇa' are:²⁹

- (1) 'svarasamkrama', modulation of two consecutive notes.
- (2) 'svarasandhi' junction of two notes.
- (3) 'anulbaṇa', regular measure.
- (4) 'avichinna', continuity.
- (5) 'sama', right proportion.
- (6) 'sukṣma', subtlety.

The six demerits of karṣaṇa are :

- (1) 'anāgatā' denotes the dragging which has not commenced from the first tone
- (2) 'atikrānta', transgressed dragging.
- (3) 'vicchinna', denotes the dragging that has eliminated the first mātrā.
- (4) 'viśamāhata' denotes dragging with tremor.
- (5) 'tanvanta' denotes dragging beyond three moras.
- (6) 'asthitānta' denotes dragging below three moras.

When a musical note transgresses its own place of articulation, the *sāma* chanters call it 'visvara', but the lute-players call it 'virakta'.

Niśāda may be identified with 'mandra', the low or base tone of the voice as opposed to the 'madhyama' and 'uttama' (middle and high).

29. svarāt svarāṁ samkāmas tu svarasandhimanulbaṇam/
avicchinnam samam kuryāt sūkṣmaṁ cchāyātapopamam// I.6.17
anāgatamatikrāntaṁ vicchinnaṁ viśamāhataṁ/
tanvanta masthitāntaṁ ca varjayet karṣaṇaṁ buddhaḥ// I.6.18

‘*mandra*’ takes the comparative as well as the superlative degree (i.e. *mandratara*, *mandratama*). *Niṣāda* has been characterized by three attributes:

- (1) ‘*aparvata*’, without any knot or joint. (comm. It is called ‘*aparva*’ because it is not different from ‘*mandra*’).
- (2) ‘*asaṁjñatva*’, without any designation.
- (3) ‘*avyayatva*’, indestructibility. (comm. It is indestructible because it is without number, gender and case).

Gods are delighted with ‘*kruṣṭa*’, men with ‘*prathama*’ animals with ‘*dvitīya*’, gandharvas (divine singers) and *apsarasas* (heavenly nymphs) with ‘*tṛtīya*’, birds and manes with ‘*caturtha*’, devils, demons and imps with ‘*mandra*’, movables and immovables, with ‘*atisvara*’. Thus all beings in the creation are delighted with the musical notes of the *sāmaveda*.

The *Nār. Śik.* mentions five kinds of ‘*śruti*’.

- (1) *dīptā* (shining)
- (2) *āyatā* (extensive)
- (3) *karuṇā* (pathetic)
- (4) *mṛdu* (soft) and
- (5) *madhyamā* (medium)

‘*Dīptā*’ occurs in the ‘*mandra*’, ‘*dvitīya*’ and ‘*caturtha*’ notes, ‘*karuṇā*’ occurs in the ‘*atisvara*’, ‘*tṛtīya*’ and ‘*kṛṣṭa*’ notes. The remaining *śrutis*, i.e. ‘*mṛdu*’, ‘*madhyamā*’ and ‘*āyatā*’, belong to the *dvitīya* note. The ‘*dvitīya*’, being followed by the ‘*tṛtīya*’ gives rise to ‘*āyatā*’ and being followed by the ‘*caturtha*’, gives rise to ‘*mṛdu*’ *śrutis*.

The 'dvitīya' without being followed by any note, gives rise to 'madhyamā śruti'. Followed by 'Kruṣṭa' it gives rise to 'dīptā śruti'. The 'prathama' being followed by the *caturtha* gives rise to 'mṛdu' śruti and is followed by the 'mandra', it gives rise to 'dīptā śruti' which often occurs in a saman in pause. The *Nār. Śik.* prohibits' śruti,

- (i) which does not occur in pause.
- (ii) which is intervocalic
- (iii) which occurs in a short or long vowel and
- (iv) which occurs in 'ghuṭa'.

Probably 'ghuṭa'³⁰ is a designation of the palatal 'i' in two forms as *āi* and *āu*.

The restriction operates in five places.

- (i) The palatal 'i' becoming 'āi'
- (ii) The palatal 'i' becoming 'āu'.
- (iii) The palatal 'i' becoming the final of a word and joined with the three sibilants-s, ś and ṣ.
- (iv) The 'dīptā' belongs to the *udātta*, it also occurs in the *svarita*, 'mṛdu' occurs in the *anudātta*. The *Nār. Śik.* mentions three kinds of 'svarāntara'.
 - (1) *ārcika*, relating to a stanza,
 - (2) *gāthika*, relating to a prose passage and
 - (3) *sāmika*, relating to a song; 'ārcika' is *ekantara*, 'gāthika' *dvyantara* and 'sāmika' *tryantara*.

30. *dvividhā gatiḥ padāntaḥ sthitasandhiḥ sahoṣmabhiḥ / pañcasveteṣu sthāneṣu vijñeyam ghuṭasañjītam // Nār. śik., I.7.16*

The ‘*prathama*’ is employed in the *kaṭha*, *kalāpa*, *āhvaraka* and *taittirīya* recensions of the *KYV*. It is also employed in the *RV*. and the *SV*. The *āhvarakas* employ the *tṛtīya*, *prathama*, and *kruṣṭa* notes, the *taittirīyas* employ the ‘*dvitīya*’, ‘*tṛtīya*’, ‘*caturtha*’ and “*mandra*” notes. The *tāṇḍins* and *bhallavins* (i.e., in the *Pañcavimśa Brāhmaṇa* and the *Kauthuma Śākhā* of the *SV*) employ the ‘*dvitīya*’ and ‘*prathama*’ notes. The *Vājasaneyins* in the *Śatapatha Brāhmaṇa*, also employ the *dvitīya* and *prathama* notes.

The *Nār. Śik.* concludes the treatment of music with the statement that a person who knows the mode of *sāma*-chanting according to the rules specified above, is fit to teach even the masters of phonetics.

II.3.(iii) The *Gautamī Śikṣā*

This is otherwise known as the *samyogaśṛṅkhalā śikṣā*. The author regards this treatise to be the very soul of the *SV*.³¹ It is called ‘*Śṛṅkhalā*’ (chain) because it fetters the *SV*.³² It is ascribed to Gautama, who according to the *Arṣeya Brāhmaṇa* was the first seer of the *SV*. It has made a close study of the letter junction and it states that there exists no letter junction with more than seven consonants. It refers to a *Prātiśākhya* in which junction (yu) ‘*ṇṅkṣkṣv*’ is said to occur, but no such junction can be traced in any of the extant *Prātiśākhyas*. This may suggest that it was posterior to some extinct *Prātiśākhyas*.

The letter-junction in the *Gautamī Śikṣā*.

31. *eṣa sahasra varttmā nānāvartir- vibhūṣita*

32. *samyogaśṛṅkhalā nāma sāmavedanibandhanāt Gau. Śik. 11.7*

(i) Junction of two consonants**(a) *tulya yoga*:**

<i>tas, atte</i>	$t + t$
<i>yannamasya</i>	$n + n$
<i>tammnye</i>	$m + m$
<i>svargallokāt</i>	$l + l$ etc.

(b) *atulya yoga*:

<i>accha</i>	$c + ch$;
<i>śuddha</i>	$d + dh$;
<i>varṣa</i>	$r + ṣ$;
<i>vihrutam</i>	$h + r$ etc.

(ii) Junction of three consonants:

<i>akkṣaram</i>	$k + k + ṣ$
<i>brahm̐ma</i>	$h + m + m$
<i>dīrggha</i>	$r + g + gh$
<i>maddhya</i>	$d + dh + y$ etc.

(iii) Junction of four consonants (without *yama*)

<i>'udannnyāu'</i>	$n + n + n + y$
<i>kārṣṣma</i>	$r + ṣ + ṣ + m$
<i>yattsthira</i>	$t + t + s + th$
<i>appsvantara</i>	$p + p + s + v$ etc.

(iv) Junction of four consonants (with *yama*)

<i>'aggni'</i>	$g + g + yama + n$
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‘yajjma’	$j + j + yama + m$
‘daddhnā’	$d + dh + yama + n$
‘grabbhnā’	$b + bh + yama + n$ etc.

(v) Junction of five consonants (without yama)

‘ayusstryaha’	$s + s + t + r + y$
‘sannksnut’	$n + n + k + s + n$
‘tasminntsvāta’	$n + n + t + s + v$
‘visvappsnya’	$p + p + s + n + y$

(vi) Junction of five consonants (with yama)

‘buddhnya’	$d + dh + yama + n + y$
‘duhsvappnyam’	$p + p + yama + n + y$
‘mattnya’	$t + t + yama + n + y$
‘sakhnya’	$k + th + yama + n + y$ etc.

(vii) Junction of six consonants

‘kārttsnya’	$r + t + t + s + n + y$
‘sarggdhmvāha’	$r + g + g + dh + yama + m$
‘dhakkmvya’	$k + k + yama + m + v + y$

(viii) Junction of seven consonants

There is only one junction with seven consonants *yaññkṣkṣvau* $\dot{n} + \dot{n} + k + ṣ + k + ṣ + v$. Gautama has declared that there is no junction with more than seven consonants.

II.3.(iv) The Lomaśi śikṣā

This śikṣā has been attributed to Garga. The *Jātakapaddhati*

enumerates a list of authorities on astronomy, among whom Garga and Romaśā have been mentioned. Again, Romaśā as the daughter of *Bṛhaspati* occurs in the *Bṛhaddevatā* (*prādāt sutārī romaśām nāma... bṛhaspatir bhāvayavyāya rājñe* iii.156). The connection of Garga with the *SV*. may be suggested by the fact that 'Gārgya' said to be one of the thirteen teachers of the *SV*. (*Caraṇa vyūha*, p-47). Hence the authorship of this work has been attributed to Garga.

Some of its original contributions to phonetics are:- it speaks of the short, long and increased varieties of the vowel. The *sāma* chanters pronounce them with a sound resembling that of a *mṛdaṅga*. It gives an obscure etymology of '*kaṁpa*'. It states that in '*kaṁpa*' the vowel is divided into two parts by the consonant. The vowel is affected in the forepart and supported in the hindpart. Therefore being afraid, it trembles, (*svaro bhītaśtu kampate*). It also states that the pronunciation of long *kampa* should resemble the sound of bells (*prayogē ghaṇṭatālavat*). The colour of '*raṅga*' resembles the colour of the dove (*pārāvatasavarṇa*). It states that in pronouncing '*kiṭkiḍākāra*', half of 'k' and 'ṭ' should be articulated in the jaws by the tip of the tongue.

Accent in a conjunct letter belongs neither to the preceding nor to the following syllable; nor to the consonant nor to the *mātrā*. Hence the accent should be employed in the junction between the preceding half of the vowel and the following half of the consonant. In a pause, if the '*madhyodātta*' and '*antodātta*' are confused, one should regard it as '*antodātta*' and '*nīca*' are confused, one should regard it as '*antodātta*' provided the suffix is accented.

The same '*karapa*' is prescribed for a multitude of 'u' vowels-short, long or increased. If the long vowel occurs in the middle of this


multitude, 'karaṇa' is confined to the initial and the final letters, the middle ones being eliminated. If the long vowel occurs at the end of this in the initial letters, karaṇa occurs twice, being followed by 'u'. It is to be designated as 'ādimadhyānta' e.g. 'vāyo śukraḥ'. If, in the initial letters, 'karaṇa' occurs once, being followed by 'u' it is designated as ādāvantaḥ e.g. 'vayo śukro'. If a non-conjunct letter is joined with 'u', there should be 'repetition of 'karaṇa'. The 'karaṇa' in consonants either joined with 'u' or not, should occur twice, as also in 'au' and 'v'. When the labial vowels (i.e. u and au) are joined with conjuncts, there should be 'sakṛt karaṇa' (karaṇa occurring once). Elsewhere, there should be 'dviḥkaraṇa' (karaṇa occurring twice).

In cerebralization of the dental 'n' and 's' into ṇ and ṣ, sandhi is prohibited in the pause. The *Lomaśī śikṣā* defines *praṇāta* as a particular kind of accentuation in which one-fourth of a *mātrā* is indicated on the thumb, index and the middle fingers. If this indication is made once, the accent is called 'praṇāta', otherwise it is 'nīca'. The following kinds of *śruti*, viz. 1) *dīptā*, 2) *āyatī* 3) *ūtā* (4) *prahūmasā* (5) *sivāvarā* (6) *mahī* and (7) *nityā* have been enumerated.

This *Śikṣā* describes the processes of exhalation and inhalation in the mode of sāma chant. It distinguishes between the mute *d* or *dh* and the liquid *ḍ* or *ḍh* (*pādāpūrvā ye dakārāḥ pādāpūrvāstathaiva ca, ḍa iti caiva vijñeyā ḍaḍhakārepyayaṁ vidhiḥ*). It deals with the syllabication of *r*. If 'r' precedes 'y' or 'v' in the letter junction, it should belong to the preceding syllable e.g. 'sūrya' 'pūrva' etc. But if the junction takes place at the end of a stanza (*virata*) it should belong to the following syllable e.g. 'taro harya'.³³ It states that 'h' joined with 'r' (whether preceding or following), and with the preceding *amusvāra*, is doubled.

The sibilants after *anusvāra* are not doubled, but after semivowels, are doubled. 'anu' denotes an interval of time within which a particle in the sun's ray becomes visible. Four such 'anus' makes a *mātrā*. In the heart, speech has the duration of one 'anu' in the glottis, of two 'anus' in the tip of the tongue, of three 'anus' and speech released, has four 'anus' or one *mātrā*. The *Lomaśī śikṣā* shows the elision of consonant in words such as *rāndra*, *svindra*, *accha* etc.


34. *yavau tu rephasamyuktau virate ca bhavedyādi /
parāṅgaṁ tadvijānīyāttaro haryeti lakṣaṇam//*



CHAPTER-III

A

SURVEY OF THE *ŚIKŚĀS* OF *YAJURVEDA*



CHAPTER-III

A SURVEY OF THE ŚIKṢĀS OF YAJURVEDA

III.1.0 The Recensions of *Yajurveda*

YV, once existed in as many as 101 *śākhās* as it is evident from the *Mahābhāṣya* and other ancient texts. Of these 101 *śākhās*, *KYV* has 86 *śākhās* and *ŚYV* has 15 *śākhās*. Out of these two divisions of the original *YV*, five of the *KYV* and two of the *ŚYV* are existing today. They are as follows:

1. *Taittirīya saṁhitā*
2. *Maitrāyaṇī saṁhitā*
3. *Kāthaka saṁhitā*
4. *Kapiṣṭhala kaṭha saṁhitā*
5. *Caraka saṁhitā* of the Kṛṣṇa variety
6. *Vājasaneyī kāṇva saṁhitā*
7. *Vājasaneyī madhyandina saṁhitā* of the *śukla* variety.

III.1.1 *Śikṣās of the taittirīya school*

On the average, the *śikṣās* of the *Taittirīya* school are superior to those of the other. In precision of thought and in exact observation of linguistic phenomena, unlike other *Śikṣās*, they throw a good deal of light on the chronology of Indian phonetic literature. From the data available in these treatises, one can prove how some of the *śikṣās* are definitely later than the *prātiśākhya*s. Besides they try in every way to obey the duty in teaching the recitation of the vedas while, the

rest very often lose themselves in trivial prescriptions. They also point out that of all Vedic schools, that of *Taittirīyas* was at the 'earliest date concerned with the teaching of *śikṣās*. The *Vyā.śik.* which belongs to this school surmounts by far, all the other *śikṣās* in content as well as in extension. The fact that it contains a systematic and exhaustive representation of all the changes occurring in the construction of the *saṁhitā* and *pada* texts assures it the best place among all related treatises which neglect this territory completely. It has no doubt lifted itself to the state of *prātiśākhya*. Its high significance has been recognised and given expression to in the position which indigenous tradition ascribed to it. The *Vyā.śik.* supplies us with a new tool for the explanation of *Prātiśākhya* for, being older than the *Tribhāṣyaratna*, it serves as an excellent guide for the study and understanding of the rules embodied in the *Taitt.Prāt.*

III.1.2 *Vyāsa śikṣā*

The *Vyā.śik.* had been authored by *Vyāsa*, and belongs to *Taittirīyaśakhā* of the *kṛṣṇayajurveda*. It spreads over 28 chapters mainly relating to the phonetics of *kṛṣṇayajurveda*. It occupies a prominent position amongst the 9 primary *śikṣās* and 6 secondary *śikṣās*. The monumental efforts of Lüders, who edited *Vyā.śik.* in original contains detailed description of each of the *varṇas*, their names and definitions. He no doubt followed *Veda Taijasam Vyākhyā* of Pndt. Sūryanārāyn Surāvadhānī and *sarva lakṣaṇa mañjarī* by Brahmashri Raja Ghnapathi in the first decade of the present century. But unfortunately these books are now out of print and researchers are facing lots of problems due to its non-availability. This *śikṣā* has been composed Choukhamba Sanskrit Sansthan, Varanasi has published

one *Vāj. Śik.* edited by Acharya Sripattabhirana Sastri with the above two commentaries precisely, specially in metres. The first chapter deals with treatment of nouns. The second chapter deals with the treatment of restrained vowels. All the definitions are given in chapter three. The fourth to fifteenth chapters describe mainly elongation (*dīrghatva*) the bringing in of something (*āgama*), extinction (*lopa*) (*vikāras*) *ṣatva*, *ṇatva*, *repha*, aspirates (*visarga*) *yatva*, phonetic combinations (*sandhi*) discrimination (*anaikya*) and utilization (*aikya*) respectively. The sixteenth chapter describes the nature of accents and there an exposition of accents (*udātta*) grave (*anudātta*) circumflex (*svārīta*) and *prācaya* is done. A combination of both *udātta* and *anudātta* occurs in circumflex accent which had several types e.g. *abhinihita*, *kṣipra*, *praśiṣṭa*, *nitya*, *tairo vyañjana*. Seventeenth chapter contains the euphonic combination of accents and vowels. The eighteenth chapter describes the locations for the accents in order, the grave accent is placed in first line of the last finger, the circumflex occupies the last line of the third finger, *prācaya* is the middle line of the middle finger. Acute is located in the middle line of the index finger. The principles of doubling is given in nineteenth chapter. Twentieth chapter brings about components occupying the vowel position. *Svarabhaktis* are depicted in the 22nd and 23rd chapter. Types of *svarabhaktis* are also described such as *hariṇī*, *hamspāda*, *hastinī*, *karenu*, *hārīta*, *karvini* and *savatantra*. Twentyfourth depicts the place of articulation (*sthāna*) and its efforts (*prayatna*). Twentyfifth depicts protracted accents. Twentysixth depicts discussion of labials. Twentyseventh depicts timefactor and the last chapter concludes with the resultant effects of pronunciation.

It is available to us in four different editions.¹ It is the longest and certainly one of the most important and in several respects more interesting among *śikṣās*. It so closely follows the *Taitt.Prāt.* that it may be regarded as a materical version of the latter. It is important for two reasons, firstly because it shows very clearly how some of the *śikṣās* have their origin in the *Prātiśākhya*s and secondly being older than the *Tribhāṣyaratna*, it is an excellent guide to the interpretation of the *Taitt.Prāt.* It is accompanied by a fine commentary named '*vedataijasa*' by "*sūryanārāyaṇādvadhānī*". In the closing verses (372-373) the author calls himself *Vyāsa* (*śrīmat vyāsakaṇṭhaprasṛtam*). This may be another designation as found in the last stanza of the commentary where this *śikṣā* is called "*Śrī Śāntaraṅgiṇā vyāsa śikṣā*". The name *Śāntaraṅgiṇa* perhaps denoted an official title, whether *Vyāsa* (provided it is not a pseudonym) as is generally chosen for the mere recommendation of a work is identified with any of the other known authors bearing the same name in literature, can hardly be ever ascertained. But *Vyāsa* mentioned in the *śabdāmālā* in the *śabdakalpadruma* with the epithet *śikṣākāra* is definitely related to the author of this *śikṣā*.

Though we are left in darkness about the personal circumstances of the author, yet it may be affirmed that he belonged to the southern India and composed the work there. This is being corroborated by the fact that the MSS of the *vyāsaśikṣā*, like those of

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1. a) I.H. Lauders, *Die vyasa siksa* Gottingen, 1894.
 - b) V.V. Sharma, Modras, 1929.
 - c) K.V. sastri (Grantha text) Tirupati, 1908
 - d) P.N. Pattabhiram Sastri, *Vyasa Siksa*, along with *Vedataijas* Commentary of Sri Surya Narain Suravadhani & Sarva Lakshanmanjari Sangraha of Sri Raja Ghanapathi, Kashi Sanskrit Series, 225.

the other *śikṣās* of the Taittirīya School are to be found, 'almost exclusively, in the south. Further this *śikṣā* has a commentator who appears to be of south Indian origin.

Perhaps, an expert in one of the south Indian languages may find the influence of a south Indian dialect on one or many rules of pronunciation embodied in this treatise. While explaining the introductory stanza of the work, the predicate Bhagavat" Prof. Winternitz states that among *śikṣā* works the *vyā. śikṣā* is considered to be the earliest work. If one examines the *vyā. śik.* it will be clear that it has not the same object as that of the early *śikṣā* works and that it is a work latter than the *Prātiśākhya*s.

The following are a few relevant points for discerning the time of the *śikṣā*. It is probable that prior to its composition, the *Taittirīya*, *saṁhitā*, *Brāhmaṇa*, and *Āraṇyaka*, existed in their present text form, and perhaps only the *kaṇḍikā* division of the *saṁhitā* was not marked in the text itself. The *vāśiṣṭhīśik.* also seems to be older than *Vyā. Śik.* since it has used more original text than the latter.

The author of the "*siddhānta śik.*" also knew the *Vyā. Śik.*, and perhaps the author of the *Āraṇya śik.* used it, it is certainly older than the *sarvasammata śik.* and the *śikṣāsamuccaya*, which in their title show themselves to be the compositions of older *śikṣā*. Several paragraphs in the *sarvasammata śik.* are nothing other than mere revision of the corresponding paragraphs of *Vyā. śik.* As the author of the "*tribhāṣyaratna* quotes *sarvasammata śik.* and *śik. samuccaya*, it must be, in any case far younger than the *Vyā. śik.* The author of "*jaṭāvallī*" a small treatise on the *jaṭāpāṭha* of the *taittirīya saṁhitā* also knew the *Vyā. śik.* The author of *jaṭāvallī* has included in his text

some rules of this *śikṣā*, especially those which treat of the *jaṭāpāṭha* (30,31,60,63, 150-151, 176). The first verse of *jaṭāvalli* clearly shows that it is even later than all *śikṣās* and *prātiśākhya*s.

Only one single fact among those stated above enables one to find out a positive date. viz lack of the *kaṇḍikā* division in the *saṁhitā* text at the time of this *śikṣā*. It is evident from Madhava's *vedārthaprakāśa*, that the division was existing in the same mode as it is today, in the middle of the fourteenth century, for, madhva reads, *uṣmasi gamadhyai* (*RV.* 1.3.61-62) *bharavaso* (*RV.* I-3-14) *bhavanaḥ* (*RV.* II. 5-12) *athabhava* (*RV.* III.2-112) etc. of the original *saṁhitā* with their corresponding metrical lengths. These are found unchanged in the commentary of this *śikṣā*. Hence between the *vedārtha prakāśa* and this *śikṣā* there must be a significant distance. The author of the *tribhāṣyaratna* knew the *sarvasammata śikṣā* which, as already mentioned is partly a revision of the *vyāsa śik*. The author of the *vedataijasa* must be considerably younger than the author of the *tribhāṣyaratna* because the former had worked after the MSS. of the *tribhāṣyaratna* which were partly mutilated. One may therefore accept *Tribhāṣya ratna* of the 13th century to be the lower limit of the date of *Vyā śik*. The subject matter of this *śikṣā* as found in the V.V. Sharma's edition has been divided into 17 sections. They are:

- | | |
|---------------------------------------|---------|
| 1) <i>saṁjñāprakaraṇa</i> | (1-42) |
| 2) <i>vyañjanaparadīrghaprakaraṇa</i> | (43-75) |
| 3) <i>nānārūpasandhi</i> | (76-84) |
| 4) <i>ṣatva</i> | (85-93) |
| 5) <i>ṇatva</i> | (94-93) |

6) <i>visarjanīya sandhi</i>	(100-110)
7) <i>yātva</i>	(111-121)
8) <i>aikya</i>	(122-125)
9) <i>ot-et-aikya-ākāra</i>	(126-136)
10) <i>purva-aikya-ākāra</i>	(137-144)
11) <i>svaradharmasamhitā</i>	(145-162)
12) <i>hastasvaravinyāsa</i>	(163-166)
13) <i>pratiṣedha</i>	(167-186)
14) <i>aṅgasamhitā</i>	(187-195)
15) <i>sthāna</i>	(196-220)
16) <i>kālanirṇaya</i>	(221-239)
17) <i>uccāraṇaphala</i>	(240-259)

According to *Vyā. śik.* the quantity of *morā* is to be compared to a snap of the finger (*aṅgulispṛṣṭanam yāvan tāvankālasto mātrikaḥ*, 317 Lüders edition) and the pause between two individual sounds in general has a duration of a quarter mora except in a consonant group (*virāmo varṇayor madhye nukālo pyasamyute*).

It's view on the place of articulation is somewhat different from other *śikṣās*. Instead of *śiras*, *tālu* and *jihvāmūla*, it mentions *vaktrādi madhyānta*. It speaks of "r" as alveolar and not cerebral.²

III.1.3 The Bhāradvāja Śikṣā

It has been edited in a complete form by V.R.R. Diksitar and

2. Cp. Burnell, Aindra school of Sanskrit grammarians, p.16

P.S.S Aiyer (Poona 1998) with Nageśvaras commentary. A part of this work, with the commentary of Jatavallabha Sastri had been edited and translated by Emile Sieg (Burlin 1892) which was published in Roman script with notes in Latin.

In the Bhāradvāja śikṣā, we do not come across the general characteristics that are found in other śikṣā treatise. For example. It has nothing to do with the general classification and pronunciation of letters, nor with the number of reciting or accentuating the Vedic text. But it lays down empirical rules to distinguish and employ in proper places, words of similar sounds and form. It teaches for examples to distinguish between *varjana*, *vṛjina*, *suṣṭuta*, *suṣṭuti tāriṣat* and *tāriṣaḥ* etc.

This is named as a *sāṁhitika śikṣā* in the commentary named *veda taijasa* of the *Vyā. śik.* which is referred to as a *jaṭā śikṣā* by the Vedic scholars of south. It is perhaps the only authoritative ancient work which enables us to fix the correct reading of the texts of *Taittirīya*, comparing the *sāṁhitā*, *brāhmaṇa* (including the *kāṭhaka brāhmaṇa*) *Āraṇyaka* and the *ekāgni kāṇḍa* of the Aapastamba's school. It is difficult to fix with the available materials the chronological limits of the treatise. It is a well known fact that the Bhāradvāja śikṣā closely follows the present redaction of the *taittirīyaveda* with its classification into *kāṇḍas*, *praśnas* and *anuvākas*. It can therefore, be provisionally assumed that the composition of this śikṣā took place sometime after the *Taitt. saṁhita* assumed its present form. There is a prevalent tradition that this śikṣā is contemporaneous with the *vyā. śik.* But there is no certainty about it. The author of the *sidhantaśikṣā* mentions in his commentary the Bhāradvāja śikṣā as the first in the

list of *śikṣās*. One may therefore consider the Bhāradvāja *śik.* as comparatively older, concerning general linguistics. It treats of *svarabhakti*, (in verses 4-5) with illustrations and counter illustrations. It also states that the latter 'लृ' should not be traded as a vowel in the beginning or at the end of the word. But it is vocalic only in the medial position e.g. '*kṛpta*' (*udāhṛtaḥ kṛptaśabdo no padādyanta yovā svarah*) (34). It states that a phonetician should know the following.

a) *vibhakti*, b) *liṅga*, c) *krama*, d) *iṅgya*, e) *kaṇṭhokti*, f) *yajuṣ*, g) *pada-saṁkhyā* and h) *varṇa saṁkhyā* (129).

The verses state that one who understands the *Bhār. śik.* attains the realm of Brāhmaṇa.

III.1.4 *Kauhali śikṣā*

It has been edited by Sadhu and published in the journal of Vedic studies. *Kauhali* (*Kauhaldi* or *kauhadi*) is an ancient name. Kohala, father of *aṣṭāvakra* is mentioned in the *Mbh.* Medini, the famous Sanskrit lexicon describes *Kohala* as the author of a dramaturgical treatise and another *Kohala* as the author of a *prākṛit* grammar and still another as a writer on music. This name occurs also in the *Śa.Brā* (ii-4.3) *Bṛ.Ār.Up.* (iii-5.1) *Āśv.Śr.* (iii-4.4) and the *Śān. Ār.* (15). The *Kāṭhaka saṁhitā* mentions- *Aryalah Kahodih* whereas the Jaiminiya *Brā*, has *Aryalah Kaholiḥ*. Another interesting variation of the name is *kaphodiḥ* which occurs as *Ayalah kaphodiḥ* in the *kapiṣṭhala kaṭha saṁhitā* (xxxix-5. 218). The *sivādigaṇa* on Pāṇini (iv. I. 112) reads *kohaḍa* and *kohada* side by side. Evidently it is one and the same name.

The *Taitt.Prā.* mentions the opinion of a phonetician named

kauhaliputtra (*samam sarvatreti kauhali puttraḥ*, *Taitt.Prā.* 17.1.2) who held that the degree of nasality in *anusvāra* and the nasal consonant was moderate. But this opinion is not mentioned in this *śikṣā*. Hence *kauhaliputtra* may be different from *kauhali* to whom the present *śikṣā* is attributed. Moreover, the first verse of the *śikṣā* implies that it is not the work of *Kauhali* himself, but it simply represents his views. “*atha śikṣām pravakṣāmi kauhalīyama tānugam*”. This *śikṣā* has been recognized as one of the main *śikṣā*. Śrinivāsa, in his enumeration of the nine important *śikṣās* puts it in the fifth place. The *yajusbhūṣaṇa*, a commentary on *Pari. śikṣā*, also gives the same enumeration. Kasturi Rangacarya, in his introduction (p-20) to the *Taitt.Prā.* quotes three verses mentioning to present *śikṣā* in the eighth place, viz-1) *Vyāsa* (2) *Laxmi* (93) *Bhāradvāja* (4) *Āraṇya* (5) *Śambhū* (6) *Āpiśalī* (7) *Pāṇini*, (8) *Kauhali* (9) *Vaśiṣṭha*.

It belongs to the *Taittirīya* school, because verse 45 of the *śikṣā* is the same as verse 27 of the *kāṇḍānukrama* of the *ātreyaśakhā*. Verse 55 states that only he can expound the *jatāpāṭha* who knows the scriptures like the *prātiśākhya*s and who is an expert in all the *śikṣā*. This reference indicates that it is a comparatively recent compilation. Regarding manual gestures in accentuation, it prescribes the use of the right hand and not the left hand (35).

In verse 48, it quotes Ātreya. Its rules can be compared to those of the *Taitt.Prāt.* It contains altogether 82 verses. Among topics of general interest to phonetics, it deals with the varieties of accent, particularly of the circumflex accent, the eight fictitious recitations (*aṣṭavikṛtis*) varieties of tempo (*vṛtti*), the vowel quantity and *svarabhakti*.

III.1.5 *Sarvasammata śikṣā*

The Ms. of the *Sarvasammata śikṣā* examined by kielhorn contained only 134 verses. The Ms. (No. 998 of Madras) examined by Verma contained 170 verses while that which was edited and translated by A.O. Franke (Gottingen 1886) contained only 49 verses with an anonymous commentary. Franke's edition made only a meagre treatment of accent and quantity. The author of the *Sarvasammata śikṣā* used by Verma, was Keśavārya son of Sūryadeva Buḍhendra and the commentator's name was Manic Bhatta. Franke's commentator was perhaps a different person, for not only his commentary varies in point of treatment but also it varies in its introductory verse. Keilhorn's MS. was also accompanied by an anonymous commentary which, besides other authorities quoted a work by the same author, entitled "Śikṣācandrikā" the introductory verse of this commentary is the same as that of the commentary of Franke's edition viz.

"*dhyātvā sarvajaganātham śāmbam sarvārthārādhakam /
vyākhayāyate' dhunā śikṣā sarvasammatalakṣanam //*"

The commentator, in all probability, was a man from "Orissa" for he begins his treatise with a homage to Lord Jagannātha and Śāmba. According to a story prevalent in Orissa Śāmba once had some childish pranks with a hermit and for that reason was severely cursed. As a result Śāmba had to suffer from leprosy but later on he was cured of that disease by his unflinching devotion at the feet of Lord Sūrya.

Manic Bhatta explains *sarvasammata* as that which expounds subjects common and acceptable to the entire phonetic works belonging to the *Taittirīya* School. Franke's commentator does not

give any such explanation. Again Franke's edition has only two verses on accent describing the castes of the three accents, while the Madras MS. has thirty three verses and a fairly copious treatment of accent.

Regarding this *śikṣā*, Lüders remarks that certain portions of this work are evidently nothing but collaboration of the corresponding portions of the *Yyā.śik*. This may be true of Franke's edition but not so much of the Madras MS. used by Verma.

This *śikṣā* contains some material hardly to be met with in any other extant *śikṣās*. For instance it observes the quantity of a consonant without a vowel is a quarter mora; the quantity of a pause, between a labial vowel and the first member of a mute series is a half mora, provided the mute series intervenes between two labial vowels e.g. "Utpāta" where the pause between "U" and "T" was said to be a half mora'. Kielhorn's MS. deals with doubling, *svarabhakti*, *vivṛtti*, faults in Vedic recitation, the vowel quantity, accents including the varieties of the circumflex syllabication, *raṅga*, manual gestures in accentuation etc. Verses describing manual gestures are interesting.

The right hand should assume the shape of cow's ear (*gokarṇākṛti*) and eyes should be fixed on its tip. Then the thumb finger should move to denote the accents. Just as man goes to woman and not woman to man, likewise the thumb goes to all the fingers. The thumb touches the middle joint of the remaining fingers to indicate the grave, circumflex, *prācaya* and the acute accents respectively. Optionally the lower joint of the index finger is the place of the acute, the lower joint of the little finger is the place of grave, the upper joint of ring finger is the place of the circumflex and the middle joint of the middle finger is the place of the *prācaya* accent.

The word 'dhṛti' here is used as synonym of "Pracaya". The date of this śikṣā does not seem to be very recent, for it has been quoted both by the *Tribhāṣyaratna* and the *Vaidikābharaṇa* on *Taitt.Prāt.* (XIV. 6).

III.1.6 Āraṇya śikṣā

It is a monograph on the peculiar accentuation of Vedic passages met with in the *Taittirīya Āraṇyaka*. This śikṣā in its introductory verse professes to have been based on nine other śikṣās. Hence it is a comparatively recent work. It is also accompanied by an anonymous commentary. It enumerates words with accent in different positions in order to remove the doubts of vedic reciters. (*adhyetṛṇām sandehānām, nivṛttaye*). It mentions an interesting theory according to which the final syllable of a word has low accent if the penultimate is long and high accent if the penultimate is short.

It does not accept this theory as a general principle. The passage dealing with this theory first enumerates words from the *Taittirīya Āraṇyaka* which end in two syllables with a high accent e.g. "avalumpatu" (X.24.1; X.25.1) where the normal accent should have been only on the penultimate syllable as in "avalumpatu". An opponent here suggests that the enumeration of such words is unnecessary because of the general rules, which propounds that with a short penultimate the final syllable has the high accent. The solution offered by this śikṣā is the following viz. although this phenomenon often occurs, yet it cannot be accepted as a general rule, for it is contradicted by counter examples *titaḥ, kṛṣṇaḥ* etc.

It is probable that this theory refers to a state of development

of the musical accent to the stress accent, in which the quantity of the penultimate syllable seems to have played some part. It is not unlikely also that this theory refers to the stress accent of penultimate syllable which may have left the final syllable with a weak expiratory accent. Both the text and commentary of this *śikṣā* in Keilhorn's manuscript consists of 60 pages.. MS. NC. 866 Madras was used by verse. This *śikṣā* professes to solve the five question of the vedists without mentioning what are these five questions. (*praśneṣu pañcaṣumude nigame pātunām*)

III.1.7 *Siddhānta śikṣā*

This is the work of Śrinivasa Diksita. This does not deal the general principles of phonetics, but it is entirely empirical in its treatment. Like the *Bhāradvāja śikṣā*, it gives lists of words containing different sounds in alphabetic order. The only point of phonetic interest is that the final “m” of “tvam” may be optionally pronounced “n” in the Vedas. It enumerates a few more words in which the *anuṣvāra* is said to be pronounced as “n” e.g. *sinte*, *vṛnte*, *mantam*, *yundhuam*, *vṛndhuam* etc. Keilhorn's MS of this *śikṣā* was accompanied by anonymous commentary according to which the author of the original, had studied the nine *śikṣās* of Bhāradvāja, Vyāsa, Pāṇini, Śambhū, Kauhala, Vaśiṣṭha, Vālmāki, Hārita and Baudhāyana, besides the *Taitt.Prāt.* with the *tribhāṣyaratna* and the *vaidikabharaṇa* etc. the commentator quotes the *Bhāradvāja* and *sarvasmmata śikṣā*. It also quotes a vaiṣṇava Lexicon, Gangesa, the famous founder author and the promulgator of Navya Nyāya and Bhatta Bhāskara, the famous commentator on *Taittirīya saṁhitā*, According to the colophon of Varma's Ms., one Śrīnivāsadhvanindra is the author of both this *śikṣā*

and it's commentary. It contains altogether 74 verses.

The author's name in kielhorn's Ms. is Śrīnivāsa makhin (Śrīnivāsmakhinā praṇīyate). As regards the date of this *śikṣā*, it must be more recent. Verma has followed Burnell in accepting the date of Bhatta Bhaskara at about 950-1000 A.D. the date of Ganges, according to Keith, is 1150-1200 A.D. the lower limit of its date therefore was the fifteenth century A.D. (Varma)

III.1.8 *Śambhū śikṣā*

It has been edited by Weber in Indische Studien (vol-iv-p.348-349). The author of *Pāṇ. śik.* quotes *śambhū*³ while enumerating the letters. Hence the *śambhū śikṣā* may be presently older than the *Pāṇ. śik.* Kielhorn (*Indian Antiquary* v.119) and Lüders (op. cit. p. iii) regarded it to be the *Pāṇ. śik.* in another garb. But actually it is considerably different from the *Pāṇ. śik.* It lays down much more advanced theories on quantity and accent and has been occasionally quoted by the *tribhāṣyaratna* (on *Taitt. Pārt.*) and the *vaidikābharaṇa* (on *Taitt. Prāt.* I-40) commentaries. It seems to be a comparatively older work, perhaps a contemporary of *vyā. śik.* In the first verse, the author offers his greetings to Goddess Kālikā, Laxmi and Śarasvatī. It is a concise but fairly complete *śikṣā*. It deals with accent, quantity, hiatus, doubling, *svarabhakti* etc.

III.1.9 The *Cārāyaṇīya śikṣā*

This is the only extant *śikṣā* belonging to *Cārāyaṇīya* School. It still exists in manuscript form, and has not been critically edited.

3. "triṣaṣṭhi catuṣaṣṭhir vā varṇā śambhū mate matā" *Pāṇ. śik.* verse-3.

Being a complete śikṣā (even more complete than the *Yājñ. śikṣā*) it awaits the attention of some capable scholar for its critical edition and publication. The *cārāyaṇīya* school according to the *caraṇavyūha*, was one of the twelve subdivisions of the caraka school of Black Yajurveda.⁴ The school was known to Patañjali for he speaks of a desciple of *cārāyaṇa* fond of a blanket⁵? It quotes the *Vāj. Prāt* on two occasions⁶, hence it is posterior to the *prātiśākhya*s. It has independent view on the place of articulation of the alphabetical sounds. While the *Pāṇiniya śikṣā* enumerates eight places only (*aṣṭau sthānāni varṇānām*), it has, instead, enumerated ten places, the two more, being “*serkva*” (corner of the mouth) and *dantamūla* (roots of teeth)⁷

It prescribes the cerebral pronunciation of “ṛ” and “r”.⁸ It prohibits the pronunciation of *svarabhakti* as “r” or “u” (vol-9). This prohibition is also within the *Yāj. śik.* It may be assured that “i” and “u” vocalization of *svarabhakti* was current in the area where this śikṣā was composed. According to pischel,⁹ a vocalization of *svarbhakti* was frequent in the areas dominated by *Ardhamagadhī* and *Apabhraṁśa* dialects. Hence it may be negatively asserted that this śikṣā was not composed at least in these areas.

This śikṣā is called by two other names viz- (a) *mahāśikṣā*

4. *yajurveda ṣaḍaśīrbbheda bhavanti tatra carakaṇām dvādaśavidhā bhabanti caraka hvarakacārāyaṇīyaḥ*. (10-11) Op.cit. ed. Weber.

5. *kambala cārāyaṇīyaḥ (Mahābhāṣya)* 1.1.73

6. *varṇasyādarśanaṁ lopaḥ- Vāj. Prāt.* I. 141-vol-9

7. *dasasthānāni varṇānām kīrtayanti manīṣīṇaḥ uraḥ, kaṇṭhaḥ, śīras tālu, danta oṣṭhau tu nāiskā jīhvāmūlān tu śṛkvasca dantamūlastathaiva ca.* vol-1.

8. *mūrdhanyaḥ ṛṭurasā jñeya dantyā itulasā smṛtaḥ*, vol-2

9. *Grammatik der prakrit-sprachen* p.123.

and (b) *cārāyaṇīyakam*. It consists of 10 *Adhyāyas* with three hundred and thirty-five *ślokas*. It professes to be the work of *cārāyaṇi* (*etat cārāyaṇermatam*- 2nd *Adhyāya*). It quotes Vaśiṣṭha and Sanat kumar. (*Adhyāya*-iii. 2). The contents of different chapters along with the number of *ślokas* in each chapter are:-

Chapter	No. of <i>ślokas</i>	Contents
i	64	classification and pronunciation of letters.
ii	57	letter junction.
iii	37	word junction.
iv	28	study and recitation of Vedas
v	18	varities of <i>svārīta</i>
vi	19	<i>virāma</i> , <i>mātrā</i> , <i>vivṛtti</i> and an enumeration of classical metres
vii	8	<i>vṛtti</i> (tempo)
viii	46	<i>piṇḍa</i> (<i>ayaḥpiṇḍa</i> , <i>jwālāpiṇḍa</i> <i>svārabhkti</i> and <i>raṅga</i>)
ix	18	<i>krama</i> (doubling)
x	40	<i>krama</i> (doubling)

The fact that it enumerates the classical metres goes to prove that it is of more recent data than what it actually claims.

III.2.(0) Śikṣās of ŚYV : An Introduction

The differences and deviations in rituals and ceremonies among the followers of the *Kāṇva* and *Mādhyandina sarṁhitās* of the ŚYV are not very significant. As observed by B.R.Sharma, these two śakhas have *Kalpasūtras* and *prātiśākhyas* at the common authorship which make the merger into another śākhā or change over from one śākhā to another in the same line easier and smoother,¹⁰ of the surviving two *Mādhyandina* and *Kāṇva*, *Mādhyandinasarṁhitā* is followed exclusively throughout the *Aryavarta*. Moreover, this *sarṁhitā* has the largest number of followers compared to any other *sarṁhitā* in the North and South India. The *sarṁhitās* of the ŚYV are closely interrelated. The *śrautasūtras*, *gṛhyasūtras* and *Prātiśākhyas* of ŚYV consider the *Mādhyandinaśākhā* as their main basis as Ananta says on the *Vāj.Prāt.* 1.1. that:-

*samagrodāharaṇalābhena ca mādhyandinīya-
śākhīyamevedaṁ prātiśākhyamiti gamyate //*

For the present work, an analysis of the following śikṣā texts have been done:-

1. *varṇa-ratna-pradīpa-śikṣā*
2. *prātiśākhya-pradīpa-śikṣā*
3. *svarabhakti-lakṣaṇa-pariśiṣṭa-śikṣā*
4. *krama-sandhāna-śikṣā*
5. *galadṛk-śikṣā*
6. *manaḥsvāra-śikṣā*
7. *mallaśarma-śikṣā*

10. *śukla-yajurvediā kāṇva sarṁhitā* edited by B.R. Sharma, Vol.-I, p. 11

8. *svarāṅkuśa-śikṣā*
9. *sodaśaślokī-śikṣā*
10. *avasānanirṇaya-śikṣā*
11. *kramakārikā-śikṣā*
12. *vāśisthī-śikṣā*
13. *kātyāyanī-śikṣā*
14. *māṇḍavī-śikṣā*
15. *keśavī-śikṣā*
16. *keśavakṛtapadyātmikā-śikṣā*
17. *vedaparibhāṣā-sūtra-śikṣā*
18. *vedaparibhāṣā-kārikā-śikṣā*
19. *saṁketa-bodhikā-śikṣā*
20. *pārāśarī-śikṣā*
21. *amoghā-nandinī-śikṣā*
22. *laghu-amoghānandini-śikṣā*
23. *mādhyaṇḍinī-śikṣā*
24. *laghu-mādhyaṇḍinī-śikṣā*
25. *yajñavalkya-śikṣā*

Most of these *śikṣā* texts have been published in the “*śikṣā-saṁgraha*” edited by Acharaya Shri Ramprasad Tripathy. However single analytical studies on the above *śikṣā* texts are rarely available. Only on the basis of the texts and some of the commentaries published in the “*śikṣā-saṁgraha*”, an humble attempt has been made in this chapter

to prepare a comparative analysis of the above śikṣās. Before the analytical studies, a general survey of the śikṣā texts of ŚYV is presented below-

III.2.(i) *Varṇaratnapradīpikāśikṣā*

Varṇaratnapradīpikāśikṣā is attributed to Amareśa who belongs to the genealogy of Bharadvāja. It is a fairly complete śikṣā consisting of 227 *kārikās*. The author admits that he has followed the *prātiśākhya*¹¹ as he says I shall explain the śikṣā that has followed the *prātiśākhya*, for the correct recitation of young students as well as for acquiring knowledge about the letters. But this śikṣā does not deal with all the themes of *prātiśākhya*. For example- with regard to accentuation, it states only the general rules. The subjects dealt with in this śikṣā, do not follow the order of the *prātiśākhyas* but they follow their own arrangement as stated below.

The arrangement of subjects in this śikṣā is as follow: -

- i) Benediction and authorship 1-3 verses.
- ii) Recitation of the Vedic texts should precede the understanding of accentuation and euphonic combination 4-9 verses, cp. (*Vāj.Prāt.I, 1.4*)
- iii) Enumeration of letters. 10-17 verses cp. (*Vāj.Prāt.VIII, 1-20*)
- iv) Explanation of technical terms- *Jit, dhi, mut, kaṇṭhya, sim, bhāvī* and *upadhā*, 18-20 verses cp. (*Vāj.Prāt.I, 44-54*)
- v) Enumeration of particular letters, *la, lha, the jihvāmūlīya,*

11. *so'haṁ śikṣāṁ pravakṣyāmi prātiśākhyānusārīṇāṁ/*
bālānāṁ pāṭhaśuddhyarthāṁ varṇajñānādi hetave// verse-3

upadhmānīya and *nāsikya*, which are not used by the *Mādhyandinas*. 21 verses cp. (*Vāj.Prāt.* VIII, 33-34)

- vi) Definition of *hrasva*, *dīrgha*, *pluta*, *aṃ* and *paramāṃ* 22-23 verses, cp. (*Vāj.Prāt.* I, 55-61)
- vii) Description of the *sthāna*, *karāṇa*, and *prayatna* etc. *Prayatna* is not described in the *prātiśākhya*. 24-43, verses cp. (*Vāj.Prāt.* I, 62-84)
- viii) Rules of syllabic division (*pūrvāṅga parāṅga* *carcā* 44-55, verses cp. (*Vāj.Prāt.* I, 102-106)
- ix) Description of the nine letters (*ayogavāha* sounds which occur without being given together with other letters), *anusvāra*, *visarga*, *nāsikya*, *yamas*, *jihvāmūlīya* and *updhmānīya* which never occur independently. The syllabication of *svarabhakti* is also described from 50-53 verses.
- x) Eight kinds of the circumflex accents with definition and' illustration, *kampa* and *pracaya*, manual gestures for these accents. 56-87 verses.
- xi) The three conditions of the human body-*āyāma*(stretching) *mārdava*(softness) and *abhighāta* (striking) conducting to the production of sounds. The upward, downward and oblique movements of the body in accentuation 88-90.verses (*Vāj.Prāt.* i. 31-32)

- xii) If *udātta* joins with *anudātta* or *svarita*, the resultant is *udātta*.
The combination is of six kinds.

(a)	<i>anudātta</i>	+	<i>udātta</i>	.....	<i>udātta</i>
(b)	<i>udātta</i>	+	<i>udātta</i>	.....	<i>udātta</i>
(c)	<i>jātyasvarita</i>	+	<i>udātta</i>	.....	<i>udātta</i>
(d)	<i>udātta</i>	+	<i>padavṛtta</i>	.....	<i>udātta</i>
(e)	<i>udātta</i>	+	<i>tairovyañjana</i>	.....	<i>udātta</i>
(f)	<i>udātta</i>	+	<i>tairovirāma</i>	.....	<i>udātta</i>

These changes are explained with sufficient illustrations. 91-101, verses (*Vāj.Prāt.* 2nd chapter)

- xiii) Estimation of the relative strength of vowels 102-105 verses.

xiv) Rules of euphonic combination 106-214 verses (*Vāj.Prāt.* iii,iv,v,vi) *Lopa* (elision) *agama* (augment) *vikāra* (modification) and *prakṛtibhāva* (retention), are dealt upon. This includes *svarasandhi*, *vyañjanasandhi*, and *svaravyañjanasandhi*, euphonic changes of *visarjanīya*, *anusvāra* and its division etc. Here, in verses 177-179, some euphonic combinations are compared to *ayahpiṇḍa*, *urṇapiṇḍa*, *dārupiṇḍa* etc. These terms are not mentioned in the *prātiśākhya*. In the *Yaj.Śik.* they are defined with illustrations. The verses 194-195 state that there can be one, two, three, four, or more words in a *pāda* (line of a verse). This fact has found a place in the first chapter of the *prātiśākhya* as one of the general subjects of discussion, but here, it is intermixed among the rules of euphonic changes, which seem to be irrelevant (*Vāj.Prāt.* i. 157).

- xv) Description of the colours and presiding deities of letters. 215-216 verses (*Vāj.Prāt.* viii 35-42)
- xvi) Classification of words- *nāma* (name), *ākhyāta* (verb), *upasarga* (preposition) and *nipāta* (particle) their presiding deities. 271-219. (*Vāj.Prāt.* viii. 47.55)
- xvii) Description of the castes, presiding deities etc. of different accents and letters. 220-227 verses.

III.2. ii) *Prātiśākhya-pradīpaśikṣā*

This is a more recent and major work written by Bālakṛṣṇa, the son of Sadasiva (vide verse 3). It was composed in the year 1802 vikrama samvat in the month of Magha, bright fortnight, Sunday. Bālakṛṣṇa has produced this work after studying several *śikṣās* and *prātiśākhyas*. He mentions : *Yājñavalkya* (verse 13;15) *vāsiṣṭhi śikṣās* and *pāṇinīya śikṣā* the *mādhyandinaśikṣā*, *katyāyanaśikṣā*, *amareśiśikṣā*, *ādityapurāṇa*, *varāha purāṇa* and *parāśara smṛti*. This *śikṣā* not only states the subjects of *prātiśākhya* but also defines most of the *prātiśākhya* sūtras, section by section, with illustrations. In the *prātiśākhya*, the arrangement of subjects is not satisfactory, and the sūtras dealing with different themes, are not in proper order. The author of the present treatise, deals with the subject matter in his own way and in some places, discusses additional matter unknown to the *prātiśākhya*.

The following headings will give an idea of the subjects dealt with.

- i. Method of studying the Vedas.
- ii. Persons unfit to study the Vedas.

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- iii. Different manual gestures.
- iv. Discussion of the acute, grave, and circumflex accent.
- v. Eight varieties of “*svarita*” with illustrations.
- vi. Description of *pracaya* accent.
- vii. Rules of vowel- combination and consonant combination.
- viii. Description of *anusvāra* and its indication by fingers.
- ix. Rules of *visarga*-combination.
- x. Section dealing with cerebralization of “s” & “n”.
- xi. Section on the vowel lengthening.
- xii. Duplication and syllabication of consonants.
- xiii. Section on *anudātta*, *adyudātta*, *dvirudātta*, *tryudātta*, *antodātta* and *prakṛti- svāra*.
- xiv. Characteristics of words and their classification.
- xv. Section dealing with *avagraha*.
- xvi. Description of *samkrama*.
- xvii. Construction of *krama* text.
- xviii. Enumeration of *krama-samdhāna*.
- xix. Section on *svarabhakti*.
- xx. Details regarding the pronunciation of r, y, v & s.
- xxi. Description of eight *vikṛtipāṭhas* (fictitious recitations such as *jaṭā*, *mālā*, *śikhā*, *rekhā*, *dhvaja*, *daṇḍa*, *ratha* and *ghana*).

III. 2 (iii) *Svarabhakti lakṣaṇapariśiṣṭa śikṣā*

This work is ascribed to *kātyāyana*. It contains 42 *kārikās*. The author's style and diction lead one to think that this work belongs to a later period, than that of *kātyāyana*. This ascription was not thought condemnable, as other later works in the field, generally bore the authorship of great sages. This might be simply to claim greater antiquity. Similar instances are found in the *Vyā. śik.*, *Mādh. śik.* and the *Bhāradvāja śikṣā* etc. In this work many *pratyāhāras* which are known as Pāṇini's inventions, are used. Had *kātyāyana* been the author of this work, he would naturally have used the same *pratyaharas* in his *prātiśākhya*, *pratijñā sūtra*, *bhāṣika sūtra*, etc, so that the bulk of these works could have been reduced to two-thirds of their present length. The last six verses of the treatise deal with *svarabhakti* and are evidently the reproductions from the *Yāj. śik.*

The subjects dealt with in this *śikṣā* are:-

1. Varities of *svarita*.
2. Some euphonic combinations.
3. Duplications
4. Classification of euphony.
5. Description of *vivṛtti* and it's kinds.
6. Different kinds of *svarabhakti*.

III.2. (iv) *Krama-sandhāna śikṣā*

The authorship and subject matter of this treatise are enumerated in the first verse as:-

*yathā samāmnātārṁ kramāvasānārṁ saṁkrameṣu/
kramaśā strāanusāreṇa sandhānārṁ procyate'dhunā//*

Which means:- I am going to enumerate *krama-sandhānas* in every chapter of *VSM*, as they have been collected in the *saṁkramas*. According to the *krama*-text, the “*saṁkrama*” has been defined by *kātyāyana* as the recurrence of the beginning of the third word (*tripadādyavartamāne saṁkrame*, *Vāj.Prāt.* IV-166) The word is derived as *sankramyate iti saṁkramaḥ* and means the combination of the recurring words with the non-recurring words. *Kramapāṭha* denotes the joint recitation of the two words, the first with the second, the second with the third, the third with the fourth etc, so that the order a b c d, gives the *krama* numbers ab, bc, cd.

Whenever *sankrama* takes place, the recurring words are dropped; the combined recitation of the next word is called “*krama sandhāna*” e.g. (i) *viśvadhāḥ parameṇa* (*VSM*. I.2) where the word “*asi*” between “*viśvadhāḥ parameṇa*” has been omitted (ii) *hvārṣitśatadhāram* (*VSM-I-2-3*) where “*vasoḥ pavitramasi*” has been omitted between “*hvārṣit*” and *śatadhāram*” etc.

Enumeration of *krama-sandhānas* in *VSM*

<u>Chapter</u>	<u>No of <i>krama-sandhānas</i></u>
i	42
ii	19
iii	3
iv	nil

v	7
vi	nil
vii	2
viii	nil
ix	2
x	nil
xi	2
xii	1
xiii	4
xiv	3
xv	8
xvi	nil
xvii	nil
xviii	2
xix	nil
xx	4
xxi	nil
xxii	2
xxiii	3

xxiv	nil
xxv	nil
xxvi	nil
xxvii	nil
<u>xxviii</u>	<u>2</u>
Total-	115

There are altogether 115- *krama-sandhānas* in the *VSM*.

III. 2. (v) *Galadṛkśikṣā*

This work calculates the number of *Rks*. which are repeated in each chapter of the *VSM*. The work is a reproduction of the second section of *Mādh. śik*. It's date and authorship are unknown. There are altogether 1975 repeated (*Rks* in the *VSM*)

In the chapter I, XXIV, XXIX, XXXI, XXXII and XXXIX no *rk*, has been repeated.

Enumeration of the repeatd *Rks* in *VSM*

Chapter	No of repeated <i>Rks</i>	Chapter	No	Chapter	No
i	nil	xviii	69	xxxvi	13
ii	33	xix	93	xxxvii	13
iii	62	xx	90	xxxviii	22
iv	the number has not been mentioned	xxi	57	xxxix	nil
		xxii	19	xl	13

v.	41	xxiii	57
vi.	35	xxiv	nil
vii	44	xxv	44
viii	58	xxvi	25
ix	39	xxvii	44
x	32	xxviii	53
xi	88	xxix	nil
xii	108	xxx	nil
xiii	53	xxxi	nil
xiv	36	xxxii	nil
xv	54	xxxiii	87
xvi	63	xxxiv	57
xvii	97	xxxv	18

Total = 1975

evam catuṣ ṣaṣṭiṛco viluptau ekādaśottaraśatāni ṛco'dhikāśca //

III.2 (vi) *Manahsvāra Śikṣā*

The authorship of this work is ascribed to Brahmā and through *yājñavalkya*, it was known to the public. It enumerates the *mantras* of *VSM* containing words with various types of accents as stated below.

1. *tripadā dviravasānamadhye'nudāttāni* 45
2. *tripadā dviranudāttāni* 22

3. <i>tripādyānta-madhyenudāttāni</i>	39
4. <i>tripada dvirudāttāni</i>	31
5. <i>tripāda madhyodāttāni</i>	24
6. <i>tripadā antyodāttāni</i>	31
7. <i>tripadāmadhye antyodāttāni</i>	6
8. <i>tripadā kampāḥ</i>	10
9. <i>tripadājātyāḥ</i>	11
10. <i>tripadā madhye takārāntāḥ</i>	6
11. <i>tripadānte takārāntāḥ</i>	7
12. <i>tripadā madhye nakārāntāḥ</i>	3
13. <i>tripadānte nakārāntāḥ</i>	2
14. <i>tripadāntarādyudāttāni</i>	5
15. <i>catuspadā dviravasānā madhye</i> <i>nudāttānyathādimadhyo dāttāni bhavanti</i>	179
16. <i>catuspadādyudāttāni</i>	101
17. <i>catuspadādyudāttamadhyenudāttāni</i>	130
18. <i>catuspadādyudātta madhye nudāttāni</i>	113
19. <i>catuspadā madhyodāttāni</i>	140
20. <i>catuspadā antyodāttāni</i>	99
21. <i>catuspadā madhye antodāttāni</i>	39
22. <i>catuspadā prathame yo jātyāḥ</i>	130
23. <i>catuspadā madhye jātyāḥ</i>	27
24. <i>catuspadā madhyentyo jātyāḥ</i>	64
25. <i>catuspadā kampo jātyāḥ</i>	10

26. <i>catuspadā kampamanontakāḥ</i>	55
27. <i>catuspadā dvikampāḥ</i>	4
28. <i>catuspadā dvirjātyāḥ</i>	14
29. <i>catuspadā madhye takārāntāḥ</i>	43
30. <i>catuspadā antye nakārāntāḥ</i>	40
31. <i>catuspadā madhye nakārāntāḥ</i>	26
32. <i>catuspadā ante nakārāntāḥ</i>	31
33. <i>catuspadettara dyudāttāni</i>	18
34. <i>avasāna dyudāttāni</i>	24
35. <i>avasānā dyanudāttāni</i>	26
36. <i>avasāne kampāḥ</i>	17
37. <i>avasāne prathamārdhodāttāni</i>	9
38. <i>avasānāntodāttāni</i>	11
39. <i>avasane jātyāḥ</i>	21
40. <i>avasane dvirjātyāḥ</i>	5
41. <i>avasane dvitīyārdhodāttāni</i>	20
42. <i>avasane takārāntāḥ</i>	8
43. <i>avasane nakārāntāḥ</i>	5
44. <i>avasane prathame dvitīyāntamudāttāni</i>	2
45. <i>avasane ādyudāttāni</i>	2
46. <i>antyavasāne ādyudāttāni</i>	60
47. <i>antyavasāne ādyānudāttāni</i>	55
48. <i>antyavasāne urdhvodāttāni</i>	28
49. <i>antyavasāne eko jātyāḥ</i>	31

50. <i>antyavasāne kampāḥ</i>	18
51. <i>antyavasāne kampāḥ, jātyāḥ</i>	10
52. <i>antyavasāne dvirjātyāḥ</i>	9
53. <i>antyavasāne trirjātyāḥ</i>	9
54. <i>antyavasāne nakārāntāḥ</i>	10
55. <i>niravasāne ādyudāttāḥ</i>	10
56. <i>niravasāne anudāttāḥ</i>	12
57. <i>niravasāne kampāḥ</i>	3
58. <i>niravasāne kampāḥ jātyāḥ</i>	3
59. <i>niravasāne eko jātyāḥ</i>	7
60. <i>niravasāne dvirjātyāḥ</i>	5
61. <i>niravasāne trirjātyāḥ</i>	6
62. <i>niravasāne madhyavasane dvirjātyāḥ</i>	5
63. <i>caturāvasāne ādyudāttāni</i>	11
64. <i>caturāvasāne ādyānudāttāni</i>	22

A detailed list of the words having accents in various places along with the enumeration of the number of the chapter and the *mantra* is furnished below:-

अथ त्रिपदाद्विरवसानमध्येऽनुदात्तानि- संख्यायां पञ्चचत्वारिंशत्

मन्त्रप्रतीकम्	अध्यायमन्त्रसं.	मन्त्रप्रतीकम्	अध्यायमन्त्रसं.
कस्त्वा	११६	समितम्	१२१५७
राजन्तमध्वराणां	३१२३	अग्नेयत्ते शुक्र	१२११०४
सनः पितेव	३१२४	तुभ्यन्ता	१२१११६
मा नः	३१३०	मयिगृह्णामि	१३११
परि ते	३१३६	प्राणपाक	६१३६
मधुमान्नो	१३१२९	मरुतो यस्य	८१३१

अग्नेयुक्ष्व	१३।३६	योगे योगे तवस्तरं	११।१४
त्वं यविष्ठ	१३।५२	तस्मा अरं	३६।१६
अग्ने पावक	१७।८	द्वन्नः	११।७०
सनःपावक	१७।९	परस्या अधि	११।७१
वार्तहत्याय शवसे	१८।३८	पुनरूर्जा	१२।९
पवमानःसः	१९।४२	तान आवोढ	२०।८३
आवो मित्रावरुणा	२१।९	अग्ने पत्नी	२६।२०
स यक्षत	२१।१५	तव वायो	२७।३४
विश्वानि देव	३०।३	ह्रस्वो धूमकेतवो	३३।२
विश्वेभिः सोम्यं	३३।१०	येना पावक	३३।३२
यदद्यकच्च	३३।३५	वरुण प्राविता	३३।४६
यन्मे छिद्रं	३६।२	इन्द्रो विश्वस्य	३६।८
शन्नो देवीः	३६।१२	दृतेदृ मा	३७।१८
स्वाहा मरुदद्भिः	३७।१३	योगः	३९

अथत्रिपदा द्विसुदात्तानि-

प्रघासिनो हवामहे	३।४४	वयं सोम	३।५६
मही द्यौः	८।३२।१३।३२	सह रय्या	१२।१०, ४१
अग्निः प्रियेषु	१२।११७	समुद्रस्य त्वा	११।४
शुक्रज्योतिश्च	१७।८०	वैश्वानरो न	१८।७२, २६।१८
पावकानः	२०।८४	सुनावमारुह्यं	२१।७
देवस्य चेतसो	२२।११	राति सत्पतिं	२२।१३
देवस्य सवितुः	२२।१४	उहह्वरे गिरीणां	२६।१५
उच्चाते	२६।१६	द्रविणोदा पिपीषति	२६।१६
विभवतारं हवामहे	३०।४	उभा पिबतं	३४।२८
हृदे त्वा	३७।१९, ६।२५	योगः	२२

अथवा त्रिपदाद्यन्ता मध्येऽनुदात्तानि

अग्ने यत्र	१२।४८	सुसमिद्धाय	३।२
मनो नु	३।५३	पुनर्नः	३।५५

उदुत्यं	७४१	तमुत्वा पाथ्योवृषा	११३४
आपो हिष्ठा	३६१४	अग्नेभ्यावर्तिन्	१२१७
अग्ने वाजस्य	१५३३	येना समत्सु	१५४०
अग्ने तमद्य	१५४४	नमस्ते रुद्र	१६११
सं मा सृजामि	१८३५	अग्ने आयूंषि	१९३८
अध्वर्यो आदिभिः	२०३१	गोमदूषुणा सत्यां	२०८१
इन्द्रायाहि तूतुजानः	२०८१	स हव्यावाट्	२२१६
सन इन्द्राय	२६१७	मध्वा यज्ञं	२७१३
अच्छायमेति	२७१४	ते अस्य	२७१७
वायो पेते	२७३२	वनस्पते अव	२७२१
कस्त्वा सत्यो	२७४०	सदसस्पतिम्	३२१३
गाव उप	३३१९	इन्द्रे उप	३३२५
उपास्मै गायता	३३६२	इन्द्राग्नी अपात	३३९२
अश्विना धर्म	३८१२	अपातमश्विना	३८१३
योगः	३९		
अथ त्रिपदाद्यानुदात्तानि			
स्वयम्भूरसि	२१२६	अग्नेकव्यवाहनाय	२१२९
समिधाग्निं	३१	त्रिं शब्दाम	३८
अस्यप्रत्नाम्	३१६	न हितेषाम्	३३२
पुश्चाहिदेव	३३४	क्षपाराजन्	१५३७
भद्रा उत	१५३९	एभिर्त्रो	१५४६
वीतं हविः	१७५७	उभाभयं देव	१९१३
अपां फेनेन	१९७९	क्षत्रस्य योनिः	२०११
धानावन्तं करम्भिणम्	२०३९	अश्विनकृतस्यते	२०३५
महो अर्णः	२०८६	इमम्मे	२१११
सुष्टुतिं सुमतीवृधा	२२१२	युन्जन्त्यस्य	२३६
एनाविश्वानि	२८१८	अभियज्ञं	२६२१
केतुं कृण्वन्	२९२१	अग्निर्वृत्राणि	३३९

वृहत्रिदिध्मो	३४।२४	मित्रं हुवे	३३।५७
उग्रा विधनिना	३३।६१	सविता ते शरीरे	३५।२
सविता ते शरीराणि	३५।५	वायुः पुनातु	३३।३
स्योना पृथिवी	३६।१३	योगः	३१

अथ त्रिपदामध्योदात्तानि

अन्तश्चरति	३।७	अग्निनर्मूर्द्धा	३।१२
महित्रीणाम्	३।३१	इदं विष्णुः	५।१५
विष्णोः कर्माणि	६।४	मित्रस्य चर्षणीधृतो	११।६२
विमुच्यद्भ्रमषाढा सि	१३।२६	स इधानो	१५।३६
भद्रो नः	१५।३८	इष्टो अग्निः	१८।५७
पुनाति ते	१९।४	यत्ते पवित्रं	१९।४१
चोदयित्री सुनृतानां	२०।८५	तनूनपादसुरो	२७।१२
द्वारो देवी	२७।१६	अग्ने स्वाहा	२७।२२
वायुग्रे गा	२७।३१	अभिषुणो	२७।४१
यदद्य सूरउदिते	३३।२०	विश्वोभिः	३३।१०
उपनः	३३।७७	पूषन्तव	३४।४१
धर्तादिवः	३७।१६	योगः	२४'

अथ त्रिपदा अन्त्योदात्तानि

वीति होत्रं त्वा	२।४	उपप्रयन्तो अद्भवरं	३।११
सोमानं स्वरणं	२।२८	यो रेवान्	३।२९
आन एतु	३।५४	युन्जाथा रासम्	११।१३
अन्तमुक्त्वा	११।३३	सीरा युञ्जन्ति	१२।६७
आप्यायस्वसमेतुते	१२।११२	मधुनक्त	१२।२८
अयमग्निः सहस्रिणः	१२।२१	ऋतजिच्च	१७।८३
ऋतश्च	१७।८२	स्वतवांश्च	१७।८५
देवो मूर्द्धा	१८।५४	हिरण्यपाणिमूतये	२२।१०
अग्निन्दूतं	२२।१७	युञ्जन्ति ब्रध्नं	२३।५
कस्त्वाच्छ्याति	२३।३९	स्वादिष्ठया	२६।२५

तरणिर्विश्वदर्शनः	३३१३६	इन्द्रावायू वृहस्पतिम्	३३१४५
तद्विप्रासः	३४१४४	प्रजापतौ त्व	३५१६
ऋचं चं	३७१	योगः	३१

अथ त्रिपदा मध्ये अन्तोदात्तानि

भेषजमसि	३१५९	उर्द्धा अस्य	२७४
काव्ययोराजनेषु	३३१७२	देवीद्यावापृथिवी	३७३
देव्यो वम्य	३७४	हयत्यग्रे	३७५
योगः	६		

अथ त्रिपदा कम्पः

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आदित्यै रास्नासि	१३०	योगः	७

अथ त्रिपदा जात्यः

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अप्स्वग्रे	१२१३६	अधाह्यग्रे	१५१४५
प्रेद्धो अग्रे	१७१७६	कोसि	७२९
बाहू मे	२०१७	स्वयं वाजिन	२३११५
दैव्याहोतारा उर्द्धम्	२७१८	योगः	११

अथ त्रिपदा मध्ये तकारान्ता

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आते वत्सो मनो	१२११५	देव हूयज्ञो	१७६२
पवित्रेण पुनीहि	१९१४०	यजानः	३३३
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अथ त्रिपदान्ते तकारान्ताः

आधत्ते	२१३३	आ एहि	२६११३
तत्सवितुः	३३५	अभ्यावर्तस्व	१२११०३

अग्निं स्तोमेत २२१५ रक्षोहा विश्वचर्षणिः २६१२६

योगः ६

अथ त्रिपदामध्ये नकारान्ताः

अग्निः ज्योतिषा १३१४० उक्थ्या अव २३१२१

कया त्वं ३६१७ योगः ३

अथ त्रिपदान्ते नकारान्ता

उर्जं वहन्ति २१३४ त्रीणिपदा ३४१४३

योगः २

अथ त्रिपदान्तरा आद्युदात्ता

आयन्त १११५० ते हि ३१३३

मासु ४१३८ न यदा २०१८०

अहानि ३६१११ योगः ५

अथ चतुष्पदा द्विरवसानां मध्येऽनुदात्तान्यथादिमध्योदात्तानि भवन्ति

सा विश्वासुः ११४ शर्मासि १११४

मनोजूतिः २११३ यम्परिधि २११७

सम्बर्हिः २२१२२ अत्रपितर २१३१

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अग्नेत्व सु ४११४ अनुत्वामाता ५१२०

व्यख्यसि समख्ये ४१२४ परिमा ४१२८

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आवायो ७१७ मनो नः ७११७

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अथ चतुष्पदा ह्यनुदात्तानि

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द्यौस्ते	२३१४३	सन्ते परेभ्यो	२३१४४
मा त्वा तपत्	२५१४३	पाहि नः	२७१४३
ओ जो न	२८५	सुवर्हिषम्	२८२७

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पञ्चनद्यः	३४१४	त्वामिमा	३४१२२
सहस्तोमा	३४१४९	असुर्यानाम	४०१३
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अथ चतुष्पदा द्विकम्पः

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अथ चतुष्पदा द्विर्जात्यः

बसोः पवित्रम्	११२	तनूपा अग्ने	३११७
तत्र सिन्धुः	८५१	पवित्रे स्थः	११८६
स्थिरो भव	११४४	अपेतवीत	१२१४५
कन्या इव	१७१९७	व्यवहन्तु	-
वायव्यैर्व्यायित्यानि	१९१२७	वैश्वदेवी पुनती	१९१४१
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त्रिजात्यः

होताऽध्वर्युः	२५१२८	ब्राह्मणोऽस्य	३१११
सोमो धेनुं	३४१२१	आयुष्यं वर्चस्व	-
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अथ चतुष्पदामध्ये तकारान्ताः

अहुतमसि	११९	दिवो वा	५१९
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कोऽदात	९१४८	सोमस्यत्वषिरसि	११०५
अग्ने वृहन्	१२११३	हंसः शुचिषत्	१२११४
संज्जानमसि	१२१४६	हिरण्यगर्भः	१३१४
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किं स्विदासीत	१७११८	विश्वतश्चक्षुरुत	१७११९

वाजस्यमा	१७६३	सोममद्भ्यः	१७७४
स्वाहा यज्ञं वरुणो	२१२२	यदस्या	२३१८
देवम्बहिरिन्द्रम्	१८१२	देव इन्द्रः	२८३६
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नो भारती	-	यदूक्रन्दौ	२११२
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अश्वासय	२९५५	सहर्षशीर्षा	३११
वेदाहम्	३११८	अद्यादेवा	३३४२
चिरश्चीनो	३३७४	वितता	-
अपाधमत्	३३९५	प्रमन्महेशवसा	३४७६
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अनेजदेकम्	४०४	अन्यदेव	४०१३
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अथ चतुष्पदा अन्त्येनकारान्ताः

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प्रतिस्पशो	१३११	यामिषुं	१६३
शिवेन वचसा	१६४	द्रापेअन्धसः	१६४७
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पश्चदिशो	१७५४	वयन्नाम	१७९०
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कःस्वित्	२३९	सूर्यएकाकी	२३१०

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पितुन्	३४।७	अश्विभ्यां पिन्व	३८।४
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अथचतुष्पदामध्येनकारान्ताः

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आकऽन्दग्निः	१।२७	सीदत्वभयम्	१२।१५
अग्निवीरतमः	१५।४२	येत्रेषु	१६।६२
इन्द्रन्दैवी	१७।८६	त्रिधाहितम्	१७।१२
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अथ चतुष्पदा अन्तेनकारान्ताः

मित्रो नो	४।२७	यात	५।८
आदित्येभ्यस्त्वा	८।१	चतुर्ध्विंशत्तन्तवो	८।७१
मात इन्द्रो	१०।२२	युक्ताय सविता	१।१३
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त्रिंस्विद्वतं क उसो	२७२०	या सेना	११७७
इदृक्षास एतादृक्षस	१७८४	एतं सधस्य	१८५९
सीसेन तन्त्रं मनसा	१९८०	त्वष्टा तधत्	२०४४
आन इन्द्रो दूरा	२०४८	त्वामग्ने वृणुते	२७६
आ जुहवान इड्यो	२९१२८	य इमे	२९१३४
ते आचरन्ती	२९१४१	सुपणवस्ते	२९१४८
नाभ्या आसीत	३११३	आकृष्णेन	३३४३
प्रवावृजे	३३४४	श्मन्वतीरीयते	-
शं वातः	३५८	क्रव्वादमग्निम्	३५२९
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अथ चतुष्पदोत्तरा द्युदात्ताः

सन्त्वम्	३१९	प्रतद्विष्णुः	५१२०
त्वन्नो	२१३	न वै	२३६
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अथ त्र्यवसाना

अग्ने ब्रह्मा	१११८	वसुभ्येस्त्वा	२१६
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अत्यत्र्यान्	३४२	मनस्ते	६१५
यावान्तम्	७११	तं प्रत्नथा	७१२
विश्वेदेवास	७३४	आतिष्ठ	८५३
इन्द्रमित्	८३६	उदुत्यम्	८४१
प्रजापतेन	१०१२०	आदित्यैरास्ना	११५९
ऋचोनामात्	१८६७	आश्विनोच्छागस्य	२१४३
यङ्क्रन्दसी	३२७	दैव्यावध्यर्यू	३३३३
ब्रह्मणस्पते	३४५८	दृते दृमा	२३१८
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अथ त्रयवसानाद्यनुदात्ताः

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एषाते	२।१४	अग्निर्ज्योतिः	३।४
त्रतङ्क्रणुत	४।११	ऐन्द्रःप्राणः	६।२०
अयवदः	९।१६	मरुत्वा इन्द्र	७।३८
महा इन्द्रय ओजसा	७।४०	वाचस्पति	८।४५
ध्रुवसदन्त्वा	९।३१	अश्विभ्यां पच्यस्व	१०।३१
कुविदङ्ग	१०।३२	विश्वकर्मात्वा	१०।३२
विश्वकर्मात्वा	१४।१४	परमेष्ठीत्वा	१५।५८
परमेष्ठीत्वा	१७।६४	स्वाद्वीन्त्वा	१९।१
इदं हविः	१९।४८	दृष्ट्वा रूप	१९।७७
ऋतावान वैश्वानरं	२६।६	वैश्वानरस्य सुमतौ	२६।७
वैश्वानरो न उतये	२६।८	अग्निर्ऋषिः	२६।९
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अथ त्रयवसाने कम्पः

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मापः	६।२२	प्रवर्तकस्य	१०।१९
इयमाहिंसीः	१३।४८	अन्तरिक्षे	१६।६५
निषसाद	२०।२	महाइन्दो वज्रहस्तः	२६।१०
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अथ त्रयवसाने प्रथमाद्धोदात्तानि

आवायो	७।७	आघाये	७।३२
विनः	८।४४	ग्रहाउर्जाहुतयो	९।४

अन्तेदेवी	१२।७५	अग्निर्मूर्द्धा	१३।१४
रेतोमूत्रम्	१९।७६	अग्निश्च	२६।१
वैश्वानरस्य सुमतौ	२६।७	योगः	९ ,

अथ त्र्यवसानान्तोदात्ताः

गन्धर्वास्त्वा	२।३	अपहूता इह	३।४७
अग्नर्वो	६।२४	विवश्वत्रादित्ये	८।५
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अथैतानष्टौ	३०।२२	आसुते	३३।२१
दस्रायुवाकवः	३३।३८	स्योनापृथिवी	३५।२१
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अथ त्र्यवसाने जात्यः

पुरा कुरुस्य	१।२८	वेदोसि	२।२१
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अस्मेवः	९।२२	पुरीष्योऽसि	११।३२
अमृतं सत्यम्	-	मधुधश्च	-
शुक्रश्च	१४।६	इषश्च	१४।१६
अग्नेत्वन्नो अन्तम	१५।४८	आयुयज्ञेन	१८।२९
कुविदङ्ग	१९।६	प्रजापतये त्वा	२२।५
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योगः	२१		

अथ त्र्यवसाने द्विर्जात्यः

ओ सि	७।२९	महा २॥ इन्द्रो नृवदा	७।३९
सहश्च	१४।२७	नभश्च	१४।१५
तपश्च	१५।५७	योगः	५

अथ त्र्यवसाने द्वितीयाद्धोदात्तानि

आदित्यास्त्वक	४।३०	सोमराजन्	६।२६
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इन्द्रवायू इमे	७८	इन्द्राग्नी आगतम्	७११
ओमासश्चर्षणीधृत	७३३	इन्द्र मरुत्वो	७३५
जवो यः	९४	षोडशी स्तोमो	१५३
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वृहस्पते अति	२६३	इन्द्रगामन	२४४
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अथ त्र्यवसाने तकारान्ता

त्वमग्ने प्रतपा	४१६	इदमापो	६१७
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अथ त्र्यवसाने नकारान्ता

भद्रो मे	४३४	सजोषा इन्द्र	७३७
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अथ त्र्यवसाने प्रथमे द्वितीयान्तमुदात्तानि

उषाङ्गुणोतु	११५७	कुतस्त्वम्	३३२७
योगः	२		

अथ त्र्यवसाने ह्यादुत्ताः

एदन्	४१	द्याम्ना	५४२
योगः	२		

अथान्त्यावसाने त्वाद्युदात्ताः

माभेः	१२३	अग्नेदब्धा	२२०
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अन्धस्थः	३।२०	स्वाहा यज्ञं	४।६
वरुणस्योत्तम्भनम्	४।३६	देवीराशुद्धबोद्धं	६।१३
वाचन्ते	६।१४	स्वाङ्कृतोऽसि	७।६
सोमः पवते	७।२१	यस्ते अश्वसनिः	८।१२
बेशीनान्त्वा	८।४८	वसवस्त्रयोदशाक्षरेण	९।३४
ये देवा अग्निनेत्रा	६।३६	वसवश्त्वाधूपयन्तु	११।६०
आकृतिमग्निम्	११।६६	विष्णो क्रमोसि	१२।५
चिदसितया	१२।५३	आयुर्मे	१४।१७
नवविंशत्यास्तुवत	१४।३१	तन्तुना रायष्पोषेण	१५।७
राज्ञ्यसि	१५।१०	अधिपत्यसि	१५।१४
पञ्चते	१६।२१	गणेभ्यो	१६।२५
घृष्णवे	१६।३६	सम्भवाय	१६।४१
पर्णाय	१६।४६	ओजश्च	१८।३
जेष्ट्यश्च	१८।४	शश्च	१८।८
ऊर्क च	१८।९	अस्मा च	१८।१३
वसु च	१८।१५	एका च	१८।२४
चतस्रश्च	१८।२५	त्र्यविश्च	१८।२६
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बर्हिरर्णप्रदा	२१।३३	सुपेशसोषे	२१।३५
दैव्या होतारा	२१।३६	तिम्नो देवीः	२१।३७
अश्विनौ सरस्वती	२१।४२	अग्निः स्विष्टकृतम्	२१।४७
त्वामद्य	२१।६१	प्राच्यै	२२।२४
वाताय	२२।२६	नक्षत्रेभ्यः	२२।२८
ता उभौ	२३।२०	त्र्यगायत्रै	२४।१४
भूम्या आखून	२४।२६	वातं प्राणेन	२५।२
विधृतिनाम्ना	२५।९	अधोऽस्य	३८।२५
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अथान्त्यावसाने त्वनुदात्तानि

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इन्द्रघोषस्त्वा	५१११	रक्षोहणं वलगहनम्	५१२३
रक्षोहणो वो	५१२५	मित्रस्य मा	५१३४
आत्मने मे	७१२८	उशित्तवम्	८१५०
आपये	९१२०	एष ते निर्ऋते	९१३५
आविर्भर्या	१०१९	उर्द्धमारोह	१०११४
अग्निःपथः	१०१२९	प्रववित्रा	-
अयान्त्वा	१३१२	अयम्पुरः	१३१५६
यमुपरि	१३१५८	सजूक्रतुभिः	१४१७
अनडद्वान्वयः	१४११०	पृथिवीच्छन्दो	१४११९
अग्निदेवता	१४१२०	आच्छन्दो	१५१५
विराडसि	१५१११	प्राणश्च	१८१२
सत्यश्च	१८१५	रयिश्च	१०११०
ब्रीहयश्च	१८११२	अग्निश्च	१८११४
मित्रश्च	१८११७	चतस्रश्च	१८१२५
पष्टवाट् च	१८१२७	अश्विभ्यान्त्वा	१९१८९
अग्नयेस्वाहा	२२१६	हिकाराय	२२१७
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नृत्तयसूतम्	३०११	ऋतये स्तेन हृदयम्	३०११३
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अथान्त्यावसाने ह्युद्धोदात्तानि

एष ते रुद्रभागः	३१४७	स्वराडसि सपत्नहा	५२१४
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अग्रयेत्वा	७४७	गायत्रच्छन्दसे	८४७
बसवस्त्वा कृण्वन्तु	११५८	राज्यसि	१४१३
नृषदेवेष्ट	१७१२	कृष्णग्रीवा आग्नेया	२४१७
उन्नतः ऋषभः	२४१७	कृष्णा भौमाः	२४१०
उक्ताः सञ्चरा	२४१५, १६	धूम्रा वभूनीकाशाः	२४१८
प्रजापतये च	२४३०	सौरी बलाका	२४३३
एण्यहो	२४३६	वर्षा हूर्कृतूनामाखुः	२४३८
श्वित्र आदित्यानाम्	२४३९	पूषणं वनिष्ठुना	२५२७
नवीभ्यः पौञ्जिष्ठं	३०१८	सन्धये जारम्	३०१९
उत्सादेभ्यः कुञ्जम्	३०१०	भाये दार्वाहारम्	३०१२
मन्यवे यस्तायम्	३०१४	यमाय यमसूं	३०१५
सरोभ्यो धैवरम्	३०१६	अक्षराजाय कितवम्	३०१८
प्रतिश्रुत्काया अतनम्	३०१९	अग्रये पीवानम्	३०२१

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अथान्त्यावसाने ह्योकोजात्यः

कुक्कुटोऽसि	११६	जनयत्यैत्वा	१२२
अग्ने व्रतपते	१२८	अषते गायत्रः	३२४
ध्रुवोसि पृथिवीम्	५१३	देवान्दिवम्	८६०
वसवस्त्वा	११५८	अतितिष्ठ्वा	११६१
अयन्दक्षिणा	१५१६	सहस्रस्व प्रभा	१५६५
नम आशवे	१६३१	इमा मे	१७२
वाजश्च	१८१	वित्तश्च	१८११
सुचश्च	१८२१	देवो अग्निः	२१५६
यते स्वाय	२२८	कायस्वाहा	२२२०
अग्नेस्वाहा	२२२७	आयुर्यज्ञेन	२२३३
क्वमै	२२३४	रोहितो धूम्रोहितः	२४२
शुद्धवालः	२४३	उक्तासञ्चराः	२४१९

सूपर्णः पाञ्चजन्यः	२४।३४	खड्गो वैश्वदेव	२४।४०
अग्ने पक्षति	२५।४	ब्रह्मणे ब्राह्मणम्	३०।५
तपसे कौलालम्	३०।७	अर्म्भेभ्यो हस्तिम्	३०।११
बीभत्सायै पौल्वलसम्	३०।१७	योगः	३१

अथान्त्यावसाने कम्पः

पृथिवि देवयजनी	१।२५	अदित्यै व्युन्दनम्	२।२
अग्ने वः	२।९	समुद्रं गच्छ	६।२१
स्वाङ्कतोऽसि	७।३	स्वर्ण इडस्पते	१८।५०
तनून्पात्सरस्वतीम्	-	नरांसन्न	-
दुरोदेवीदिशः	२१।१६	वाजाय स्वाहा	२२।३२
सोमाय कुन्दुङ्	२४।३२	इन्द्राग्रयोः पक्षति	२५।५
अग्नेयेवीकवते	२९।५१	अग्नेगात्राय	२९।६०
नम्मयि पूंश्चलम्	३०।२०	सुमित्रिया न	३५।१२
योगः	१९		

अथान्त्यावसाने कम्पोजात्यः

भूतायत्वा	१।११	दिविविष्णुः	२।२५
सिंह्यसि	५।१२	तेजोऽसि तेजोमयिधेहि	१९।९
आब्रह्मन्ब्राह्मणो	२२।२२	अश्वतूपरः	२४।१
सिल्पावैश्वदेवी	२४।५	एता एन्द्रा	२४।५
कृष्णग्रीवा आग्नेया	२४।९	कृष्णग्रीवा	२४।१४
योगः	१०		

अथान्त्यावसाने द्विर्जात्यः

अस्कन्नमद्य	२।८	आग्रयणोऽसि	-
अदमुत्तरात्	१३।५७	आशस्त्रिवृत्	१८।२३
समुद्रो सिनभस्वाम्	१८।४५	कृशनिस्तिरश्चीनपृश्निः	२४।४
कृष्णग्रीवा आग्नेया	२४।१४	अन्यवायोऽर्द्धभासानाम्	२४।३७
इन्द्रस्य क्रोडो	२५।८	योगः	९

अन्त्यावसाने त्रिर्जात्यः

सिंहसि	५।१०	मित्रावरुणाभ्यान्त्वा	७।२३
महावेत्वा	-	अग्रयेत्वामह्यम्	७।४७
पृथिव्याः सधस्थात्	११।१६	त्रिवृदसि	१५।९
प्रथमाद्वितीयैः	२०।१२	मधवे स्वाहा	२२।३१
शादन्दद्भिः	२५।१	योगः	९

अथान्त्यावसाने नकारान्ता

मनो मे	६।३१	अग्रये नीकवते	२४।१६
वसन्ताय कपिञ्चलान्	२४।२०	समुद्राय शिशुमारान्	२४।२१
सोमाय हंसान्	२४।२२	अग्रये कुटरुन्	२४।२३
सोमाय लवान्	२४।२४	अन्हे पारावतात्	२४।२५
वसुभ्यः ऋश्यान्	२४।२७	इशानाय परस्वतः	२४।२८
योगः	१०		

अथ निरवसाने ह्युदात्ता

नमो वः	२।३२	इन्द्रश्च मरुतश्च	८।५५
विश्वेदेवाश्चमसे	८।५८	अवेष्टा दन्तशूका	१०।१०
उदीचीमारोह	१०।१३	मान्छन्द	१४।१८
एकयास्तुवत्	१४।२८	एवश्चछन्दो	१५।१४
बम्लुशाय	१६।१८	रोहिताय	१६।१९
कृत्स्नाय	१६।२०	उष्णीषिणे	१६।२२
विसृजद्भ्यः	१६।२३	सभाभ्यः	१६।२४
गणेभ्यः	१६।२५	तक्षभ्यः	१६।२७
श्वभ्यः	१६।२८	हरस्वाय	१६।३०
वन्याय	१६।३४	योगः	२०

अथ निरवसाने ह्यनुदात्ताः

प्राणाय मे	७।२७	प्रोह्यमाणःसोमः	८।५६
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पूषा पञ्चाक्षरेण	१।३२		
अर्थेतस्थे	१०।३	प्रतीचीमारोह	१०।१२
मूर्द्धावयो	१४।९	नवभिस्तुवत	१४।२९
रश्मिना सत्याय	१५।६	प्रतिपदसि	१५।८
अग्निमद्य	२१।५४	सूपस्था अद्य	२१।६०
योगः	१२		

अथ निरवसाने कम्पः

कृष्णोऽसि	२।१	मधुमतीर्त्रः	७।२
परमेष्ठ्याभिधीत	८।५४	योगः	३

अथ निरवसाने कम्पोजात्यः

समुद्रोऽसि	५।३३	अग्निरैकाक्षरेण	१।३१
यवानाम्भागः	१४।२६	योगः	३

अथ निरवसाने ह्येको जात्यः

विश्वेदेवा	७।३४	नवभिस्तुवत	१४।२९
नमोहिरण्य बाहवे	१६।१७	नमः कपर्दिने	१६।२९
श्रुत्याय	१६।३७	वात्याय	१६।३९
पायाय	१६।४२	योगः	७

अथ निरवसाने द्विर्जात्यः

उशिगसि	५।३२	वृष्णउर्मि	-
ज्येष्ठाय	१६।३२	बिल्मिने	१६।३५
व्रज्याय	१६।४४	योगः	५

अथ निरवसाने त्रिर्जात्यः

सोभ्याय	१६।३३	कूय्याय	१६।३८
अग्नेभागोऽसि	१४।२४	वसूनाम्भागोऽसि	१४।२५
सिक्त्याय	१६।४३	शुष्वयाय	१६।४५

योगः

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अथ निरवसाने मध्यावसाने द्वितीयः

शर्मासि	१११४	अग्नेवाजजित्	२१७
विभूरसि	५५१	आददे ग्रावासि	६१३०
इन्द्रायत्वा	६१३२	बृहद्वते	७१२२

योगः

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अथ चतुरवसाने ह्याद्युदात्ताः

प्रत्युष्टं रक्ष	११७	इन्धानास्त्वा	३११८
त्रयम्बकम्	३१६०	धामान्युशमसि	६१३
माहिर्माभूर्मापृदाकुः	६११२	अग्नेपवस्व	८१३८
अदृश्रमस्य	८१४०	वाजीकनिक्दत्	१११४६
एधोऽसि	२०१२३	इन्द्रस्यौजस्थ	३७७६
स्वाहारुद्राय	३८११६	योगः	११

अथ चतुरवसाने ह्याद्यनुदात्ताः

अग्निषोमयोरञ्जितिम्	२११५	सजूर्देवेन	३११०
अं रं शुष्टे	५१७	अग्नीषोमाभ्यां	७१९
मरुत्वन्तं वृषभम्	७१३६	उत्तिष्ठत्रोजसा	८१३४
युवं तम्	८१५३	देवस्याहम्	९११०
देवस्यत्वापृथिव्याः	१११२८	सुपर्णोऽसि	१२१४
विराट्ज्योतिः	१३१२५	इमं साहस्रम्	१३१४९
वायोः पूतः	१९१३	पुनन्तुमापितरः	१९१३७
सम्बत्सरोऽसि	२७१४५	अग्निमद्य	२८१२३
अग्निमद्य	२८१४६	ऋजव त्वा	३७११०
हिरण्यमयेनापात्रेण	४०११७	योगः	२२

Thus this śikṣā only gives stress upon the *svara* and other aspects of śikṣā as *vala*, *mātrā*, *sāma*, *santāna* are not dealt upon in this śikṣās.

III. 2.(vii) *Malla śarmā śikṣā*

This work contains 65 *kārikās* on the whole. It is also known as *hastasvara prakriyā*. The author's name is Malla Sarmā who was the devoted son of Sri Vedasvarup Vakpatisarma, belonging to the *gotra* of Upamanyu. He was an inhabitant of kānyakubja and he maintained the daily sacrificial fire. The colophone reads:-

"Here ends the *śikṣā* by Mall Sarma who was the devoted son of Khagapati, an inhabitant of the village Ghatamapora, in the city of Kānyakubja. The author's statement with regard to his parentage is apparently contradictory for while in the concluding verses he mentions that he is the son of Vedasvarupavākpati Śarma, in the colophon he is mentioned to be the son of Khagapati, The former might have been a little name and the latter a nickname both perhaps denoting one and the same person.

A few verses appear in his work, which reveal the date of the treatise. This treatise on the manual gestures for accents was composed in the year 1781 (Vikram Sambat), on Saturday, the eleventh day in the bright fortnight of the month of *Kārttika* (*ūrja*).

The author quotes Manu as the author of a *prātiśākhya* and *Ravana*, as the author of *Svarāṅkuśa*. From that it appears that the *prātiśākhyas* ascribed to many authorities were in existence. But there is no information available from any other source to support this or as to what recension of the Vedic text it belongs.

Rāvaṇa is the author of the *Svarāṅkuśa śikṣā*, a minor treatise defining the rules of accentuation and euphonic combination. A work bearing the above title is in existence but its author is Jayanta Svāmi, At

the end of the printed edition of this text, there is a footnote of the editor ascribing the authorship of the work to Rāvaṇa. The note is of little help as it might have been written with reference to the above extract of the present treatise. There are many evidences to prove that Rāvaṇa was a great author in Vedic and philosophical literature. Many extracts are to be seen in the later works from Rāvaṇa's commentary on Vedic texts. And some of them have been reproduced at the end of the first chapter of the present monograph. Rāvaṇa has also written a commentary on *kaṇāda's Vaiśeṣika sūtras*. Besides this, he has some minor works connected with the *YV*.

The main subject of the present treatise is the description of the method of indication of accents by different manual gestures. There is no other work hitherto known, which deals with this subject so elaborately. The contents of the work are:

1. General rules
2. *Mūlasthānam*.
3. *Catusvara-gati*.
4. Definition of the *pūrṇa-nyubja*, (fully bent downwards) *ardha-nyubja* and *jātya*.
5. Extent of manual gestures.
6. Egress of fingers.
7. Definition of *amunāsika*.
8. Treatment of *kṣaipra*. (The *svarita* accent on a syllable)
9. Orthographic presentation of "*udātta*", *anudātta* and *svarita*.



10. Various postures for indicating the letters of dental and labial mute-series.
11. Treatment of *śvarabhakti*.
12. Treatment of the accent in the Brāhmaṇa.
13. Divisions of *raṅga* and their indication.
14. Manual gestures for bi-syllabic words.
15. Enumeration of “*auṣṭha makāra*” sounds.
16. Origin of “*auṣṭha makāra*” sounds.
17. Enumeration of “*sthakāra*” sounds.

III.2. (viii) *Svarāṅkuśaśikṣā*

This is a small treatise containing 25 verses. The author states in the beginning that he is going to define the various kinds of accents. At first he describes the four varieties of the circumflex accent, *jātya*, *abhinihita*, *kṣaipra*, and *praśliṣṭa* and their change into tremor in particular places. Then he deals with their main accents and their combinations which result in the change of one accent into another. After that, *tairovyañjana*, *tairovirāma* and *padavṛtta* circumflexes are defined with sufficient illustrations. The author specifies the places where the circumflex should be prohibited, and the tremor should be sounded in favour of circumflex. The different varieties of tremor (short, long etc.) are also detailed here.

The 23rd verse of the work states that it contains only 21 verses and this *śikṣā* belongs to *RV*. Therefore, the four additional verses which are found in the printed edition should be regarded as interpolations. Verse 17 is definitely an interpretation verse of (*Rk.Prā.* III.3) verses 24

and 25 are obscure and occur only after the enumeration is complete. Hence they too appear as interpolations. These, are according to the author only meant for the Ṛgvedins. But as *VSM* consists largely of Ṛgportions, these rules may also be helpful to students of the *śukla yajurveda*.

As regards the authorship of the work, the name Jayanta is mentioned twice in the body of the treatise. The name “Rāvaṇa” also comes once at the foot note. (*śikṣāsaṁgraha*, p.224)

III. 2 (ix) *Ṣoḍaśaślokīśikṣā*

The name itself signifies the length of this work. The author's name is Ramkrishna. Here, some elementary principles, regarding the pronunciation of words are laid down in a clear manner. The contents of the work are.

1. Enumeration of letters.
2. Each of the original three vowels, which are the earliest and the most universal in the Indo-European languages can occur in 18 forms.
 - a. (i) *hrasva*, (ii) *dīrgha*, (iii) *pluta*. = 3
 - b. (i) *udātta* (ii) *anudātta* (iii) *svarita*. = 9
 - c. (i) *sāmunāsika* (ii) *niranunāsika* = $9 \times 2 = 18$.
3. Description of consonants.
4. Description of some contracted terms. (*pratyāhāras*)
5. Description of the terms-*sparśa*, *uṣman*, *antḥastha*.
6. The *jihvāmūlīya* and *upadhmānīya* are considered to be *ardhavisargas*.

7. Description of the places of articulation *kaṇṭha*, *tālu* etc.
8. Rules making a student fit to pronounce the sounds properly.

The author in the concluding verse states that this *śikṣā* has been emanated from the lips of Śiva.

jayantasvāminā proktāḥ ślokānāmekavimśatiḥ /

svarāṅkuśeti vikhyātā bahvṛcāṁ svarasiddhayē // 23

III. 2. (x) *Avasānanirṇaya śikṣā*

The authorship of this work “is ascribed to Ananta Deva. The name Ananta is well-known in the *śukla-yajurvedic* literature. The author of the commentaries on the *Bhaṣika sūtra*, the *pratijñā sūtra*, the *sarvānu-kramaṇī* of the *katyāyana prātiśākhya* and the *svarāṣṭaka śikṣā* is ascribed to Ananta but Ananta, in some works is mentioned as Ananta-Deva and in some others as Anantabhatta. It is, therefore difficult to determine whether different authors were known by this name or whether the same person was intended as the author of different works.

This *śikṣā* was composed in 1946 (Vi-Sam) on Thursday, the full-moon day of the bright fortnight of *phālguna* (*rasavedaṇikenḍumite* (1946) *phālgune*, *śuklapakṣake*, *pūrṇimāyam gurorvāre* 'vasānānyaṇ kitāni vai //

In this work, the fullstops (*avasana*) are enumerated as follows.

1. <i>dvyavasānā</i>	.....	1493
2. <i>antyavasānā</i>	.....	233
3. <i>tryavasānā</i>	.....	150
4. <i>caturavasānā</i>	.....	32
5. <i>niravasānā</i>	.....	56

6. <i>madhyavasānā</i>	5
7. <i>pañcavasānā</i>	2
8. <i>saḍavasānā</i>	2
9. <i>navāvasānā</i>	2
Total =	1975

III. 2 (xi) *Kramakārikāśikṣā*

The authorship of this work is ascribed to Śambhu Mihsra. The first verse pays homage to Śiva, the Lord of yogins, *Yājñavalkya* and *Kātyāyana*. The author promises to describe all the *kramavasānas* of *VSM*. The process of *kramāvasāna* as defined by *śikṣākāra* in this *śikṣā* is as follows:

avagraho'nuvākānte ardharcānte ṛcām tathā /
yajuṣām vākyāvasāneṣviti sādharmaṇo vidhiḥ // verse-6

The different types of *kramāvasānas* are

1. *naveṣṭya, dviveṣṭya, triveṣṭya, caturveṣṭya, madhyaveṣṭya, parñaveṣṭya, antaveṣṭya.*
2. *dvivṛt, trivṛt, antavṛt, anuvākavṛt etc.*
3. *dviveṣṭana, triveṣṭana, caturveṣṭana atyantaveṣṭana; anuvākāntaveṣṭana, antaveṣṭana etc.*
4. *dvyekatā, trayaikatā, caturaikatā, yugalaikatā pañcaikatā, ṣaḍaikatā, navaikatā, anuvākaikatā etc.*

Veṣṭyā, Veṣṭana, and *vṛt* are, more or less synonymous terms. This *śikṣā* states that for *avagraha*, *anuvākānta* (end of a subdivision of *yajuṣ*) *ardharcānta* (end of a hemistich) and *vākyāvasāna* (end of a *yajuṣ*)

only the general rules should be followed (sl. 6) In *kramapāṭha*, *anusvāra* preceded by a short vowel should be treated as long provided it is not followed by the word *viṣa* (sl. 6). The author of this *śikṣā* gives sufficient illustrations from *VSM*. for different types of “*Kramavasāna*”. The date of this treatise is not known.

III. 2. (xii) *Vāsiṣṭhīśikṣā*

It is the second in the list of *śikṣās* of the white *Yajurveda*. It does not deal with phonetics proper, but it simply differentiates the *ṚKs*- and the *yajuṣ* portion in each chapter of the white *Yajurveda*. This work is based on *kātyāyana's sarvānukrama*, a fact which the author admits in the first verse. This is different from the *Vāsiṣṭhīśikṣā* of the *Taitt Saṁhitā*, since the latter deals exclusively with phonetic matter. It is a recent work and its authorship is unknown.

ENUMERATION OF THE *ṚKS* AND *YAJUṢ* IN *VSM*

Chapter	<i>Ṛk.</i>	<i>Yajuṣ.</i>
i	1	117
ii	12	76
iii	63 or 62	34 or 36
iv	21 or 20	65 or 66
v	17	115
vi	17	83
vii	30	111
viii	43	104
ix	22	84
x	12	102

xi	76	26
xii	114	12
xiii	52	87
xiv	17	154
xv	46	90
xvi	33	129
xvii	95	11
xviii	36	368
xix	94	30
xx	84	14
xxi	218	33
xxii	13	113
xxiii	58	24
xxiv	nil	all
xxv	43	nil
xxvi	25	15
xxvii	44	1
xxviii	nil	46
xxix	57	32
xxx	3	170
xxxi	22 (all)	nil
xxxii	25 (all)	nil
xxxiii	119 (all)	nil
xxxiv	62 (all)	nil
xxxv	21	6

xxxvi	20	21 or 22
xxxvii	5	31
xxxviii	13 or 14	52
xxxix	2	107
<u>xxxx</u>	<u>17</u>	<u>7</u>
TOTAL	1467	2823 or it is $2823-5=2818$ (<i>athavā pañcabhirnyūnā</i>)

III. 2. (xiii) *Kātyāyanīśikṣā*

It contains only 13 *kārikās* along with a running commentary by Jayanta svamin. In this fragmentary work, an attempt has been made to describe the characteristics of the circumflex accent, both in the continuous and the word isolated texts. At the end, a short description of the accute, grave and *pracaya* accents are also given. Most of the rules prescribed here are a metrical version of those laid down in the *Vāj. Prāt.* IV. 131-141.

III.2. (xiv) *Māṇḍavīśikṣā*

This *śikṣā* is attributed to Māṇḍavya (*śl.* 1), a name mentioned in the list of families in the '*Śat.Brā.* The Māṇḍavya families, according to Varahamihira, lived in the middle, the northwest and the north of India. The nature of the *śikṣā*, however seems to indicate that it is connected more with the middle and east than with the north. For, it is exclusively devoted to the enumeration of words containing the labial plosive "b" and "v" which was probably more common in the above mentioned areas than in the north.

ENVEMERATION OF THE LABIAL "B" SOUNDS IN *VSM.*

<u>Chapter</u>	<u>No.</u>
i	15
ii	13
iii	17
iv	15
v	16
vi	12
vii	14
viii	8
ix	25
x	20
xi	29
xii	32
xiii	15
xiv	15
xv	14
xvi	15
xvii	27
xviii	24
xix	36
xx	28
xxi	26
xxii	13
xxiii	33
xxiv	28

xxv	25
xxvi	11
xxvii	8
xxviii	22
xxix	27
xxx	18
xxxi	10
xxxii	5
xxxiii	34
xxxiv	15
xxxv	3
xxxvi	4
xxxvii	5
xxxviii	10
xxxix	4
xl	1
Total	641

III.2.(xv) *Keśavīśikṣā*

This is otherwise known as the *Navāṅkasūtra* or the *Paribhāṣāṅka sūtra*. It contains nine *sūtras* with their commentry. The author is said to be the great astrologer *keśava* who admittedly follows the *Pratijñā sūtra* as it is evident from the concluding line of the *śikṣā*.¹² Kielhorn in his “Remarks on the *śikṣās*”¹³ ascribes the authorship of this *śikṣā* to

12. *iti śrīdaivajñākeśavakṛtā pratijñāsūtrānusāriṇī keśavīśikṣā samāptā* // SS.p.121

13. “Remarks on the *śikṣā*”, IA 5; p. 142

kātyāyana and only the commentary, and six *karikās* to *Keśava*. However it is hardly likely that so ancient an author as *kātyāyana* would actually be the author of this work which deals with some of the comparatively recent phonetic changes which are characteristics of Modern Indian vernaculars. Each *sūtra*, here deals with a separate subject. As those subjects seem to be of great importance to phonologists and they are specified below.

1. At the beginning of a word, the letters “y” and “v” being preceded by vowels or the preposition. “sam” should be pronounced double e.g.

- (i) *tvā vāyava* *tvā vvāyava* (i.ii)
- (ii) *tvā yunakti* *tvā yyunakti* (i. 6)
- (iii) *sam vapani* *sam vvapani* (i.21)
- (iv) *sam yaumi* *sam yyaumi* (i.22)

In the commentary author also gives counter illustrations, of the above *sūtra*.

2. In the interior of a word, the letter “y” combined with the letters “ṛ”, “h” or “r” should be pronounced like “j” e.g..

- (i) *samanyṛgbhiḥ* *samanjṛgbhiḥ* (xx.11)
- (ii) *panibhīrgūhyamāna* *panibhīrguhjamāna* (ii.17)
- (iii) *ghṛtacīryantu haryata* *ghṛtacīrjyantu haryata* (iii.4)

3. In the interior of a word the letter “ṣ” should be pronounced as “kh’ except, if the “Ṣ” is combined with the letters of the retroflex mute series e.g.

- (i) *īṣe tvā.....īke tvā* (1.1)
 (ii) *sarveṣām.....sarvekhām* (Śat.Brā)

The above rule applies to the Brāhmaṇa also.

Counterillustrations : (1) Śreṣṭhatamāya (1.1) Whers “ṣ” being combined with “th” is not pronounced as “kh”

4. In the interior of a word, if a the letter “r” is combined with a fricative which is not joined with any other consonant, it should be pronounced as “re’ e.g.

- i. *darśatam.....dareśatam* (xxxviii.17)
 ii. *parśavyena.....pareśavyena* (xxxix.8)
 iii. *śatavalśo.....śatavaleśo* (v.43)
 iv. *hvārṣit.....hvāreṣit* (1.2)
 v. *burhiṣe tvā.....barehiṣe tvā* (iii.1)

This rule is applicable to the letter “l” also, because both the letters “r” and “l” are considered as homorganic (*savarṇa*). These two letters are very widely interchangeable both in roots and suffixes and even in prefixes.

In “*hvārṣit*” (1.2) as the *repha* stands in the middle, of “in” contraction, the following “s” is cerebralized according to the rule *ādeśapratyayayoḥ* (pan. viii. 357) which states that the letter “s” in the interior of a word is cerebralized, if it is preceded by “in” contraction or the velar mute-series. Hence the above illustration is the same for both “s” and “ṣ” .

Counter illustrstions

- (i) *Yajñapatirhvārṣit* (i-2) where the letter “h” is joined with another consonant “v”, so this rule does not apply.
- (ii) *Śr̥ṣṇo dyauḥ* (xxxi-13) where the letter “ṣ” is joined with another consonant “ṇ”. Hence this rule does not apply.
- (iii) *ūrjetvā* (i.1) where the letter “r” is joined with “j” a letter other than the “Śal” contraction *pratyāhāra*. So this rule does not apply. The *keśavīśikṣā* does not recognise the “*svarbhakti*” in the in junction of r+r.

Counter illustration:

- i) *vayaskṛtam sahasṛtam* (iii-18)
- ii) *bārhaspatyāḥ pṛṣatī* (xxiv.2). etc.

where doubling of the mute series does not occur since the latter is combined with “r”.

- 5. In the interior of a word, the *anusvāra* becomes long, short, or heavy. If it is followed by ś, ṣ, s, h and r. It becomes long after a short vowel, short after a long vowel and heavy, before a conjunct consonant.

a) Long *anusvāra*

- i) *bhūyāsam sugṛhapatih* (ii.27)
- ii) *śatam himāḥ* (ii.27)

iii) *saṁ rāyaḥ* (iii.19) etc.

b) Short *anusvāra*

i) *yajumṣi nāma* (xii.4)

ii) *iṣāṁ rayīnām* (iii.13)

iii) *pṛthivyāṁ śatena* (i.25) etc.

c) Heavy *anusvāra*

i) *bheṣajam śriyā* (xxi-38)

ii) *damṣṭrābhyām* (xi-78)

iii) *havīmṣyā* (xix-20)

Counter illustration

bhāgam prajāvatī (1.1) where the *anusvāra* is not heavy, since it is not followed by *Śal* or *repha*. In the interior of a word, the whole mute series combined with “r” should be doubled-provided:-

i) it is combined with the preceding “ṣ” “ś” or “s”

ii) or preceded by *visarga*, and combined with a following *repha*.

e.g. i) *askkannamadya* (ii.8) *puskkarasrajam* (ii-33) etc.

ii) *agneḥppriyam* (ii.17) *bṛhantaḥ pprastareṣṭhāḥ* (ii-18) etc.

6. In the interior of a word the letter “s” followed by “v” or “y” should not be doubled.

e-g i) *svāsthām, svāhā* (ii.2)

This seems to be an exceptional rule. But, here it should be noted that no mention has been previously made of the doubling of “s” which might necessitate an exception.

7. In the interior of a word the letter “r” whether joined with consonants or not, should be pronounced together with the sound “e”

e-g i) *kṛṣṇośi.....kreṣṇośi* (ii.1)

ii) *pitṛmate.....pitremate* (ii.29)

iii) *ṛtviya.....retviya* (iii.14) etc.

8. In the interior of a word a short letter should be pronounced as long. But this elongation does not take place, if the short letter is followed either by the letter “a” (whether in combination with consonants or not) or by a letter joined with a consonant or *visarga*.

e-g i) *iśe tvorje tvā vāyavastha* (i.1)

Here the letters “ī” “ya” and *stha* should be sounded as long, but in *savitā* (i.1) “sa” and “vi” should not be sounded as long being followed by *ā* in *tā*.

i) *māghaśaṁso dhruvā asmin gopatau syāta* (i.1) etc.

Here the letters “gha” “pa” and “ta” should be sounded as long.

Counter illustrations:*yajamānasya* (i.1)

Here, this rule does not apply, as the letter “ja” is followed by *ā* in *mā*. Hence “ja” should not be sounded as long. This may be compared with the *pratiñās ūtra*, “*iṣat dīrghatā ca bhavati*”. The vowel length should be more than one *mātrā* and less than two, in the above cases i.e. it should be about one and half a *mātrā*.

The above nine rules are briefly enunciated by the author in *śik. kārikās* which will be useful as mnemonics only to the close student of this treatise. They will not serve any purpose for the general reader since they abound in technical terms. The subject of this treatise is the proper pronunciation of the text of the Mādhyandina recension. These rules of pronunciation seem to be purely arbitrary and in these days, the pronunciation of “*kṛ*” into “*kre*”, of “*gūhya*” into “*guhja*” and “*se*” into “*khe*” require special instruction. It may be guessed that such works on phonology had their origin mainly in a desire to keep up the traditional method of handing down phonological instruction followed by early vedic seers. It is a well known fact that even pandits who belong to some places in Eastern India pronounce “y” as “j” and a general distinctness of sounds may also be observed in their ordinary discourse in Sanskrit.

It is stated that the author of *Sarvasammataśikṣā* is also *Keśava*. But regarding the identity of *Keśava* with the author of this work, there is no evidence

III.2.(xvi) *Keśaviśikṣā* (in verse)

The author of this work is also the same *Keśava*, son of Daivajña

Gokula belonging to the genealogy of *Āstika*. It contains 21 *kārikās*. The topics fall under the following heads.

- i) Manual gestures for accents (I-6)
- ii) Pronunciation of the letter “y” (7-8)
- iii) Pronunciation of “r” and “i”, (9-11)
- iv) Pronunciation of “v” (*guru*, *laghu* and *madhyama*) 12-13
- v) Pronunciation of “s” (14)
- vi) Three kinds of *anusvāra* (*hrasva*, *dīrgha* and *guru*) (15-17)
- vii) Pauses of the voice in pronunciation (18-19)
- viii) The authorship of the work.

A careful study of the treatise will lead one to think that it is not a complete work like some others on the same subject. This work also lays down rules to be adopted by a student of the Vedas.

III.2. (xvii) *Vedaparibhāṣāsūtraśikṣā* & (xviii) *Vedaparibhāṣākārikāśikṣā*

These two works of which the author is Rāmacandra, son of Siddheśvara are considered to be the guides to the *pāda*-text. The latter work, which contains only 10 *kārikās* with a commentary, is as it were, a supplement to the former, which is in *sūtra* form. The first accurately gives in certain symbolic words, each containing four letters, the number of *Ṛks*, *anuvākas* and *pādas* in each chapter of the *VSM* and the second book explains these symbols. These two *śikṣās* have been incorporated in a special treatise entitled as- *atha visargāṅgulipradarśana-prakāramāha bhagavān maharṣi yājñavalkyaḥ*

Some of the symbols of the *veda paribhāṣāsūtrasikṣā* may be

explained here in the manner they have been explained in the “*vedaparibhaṣākārikāsikṣā*”. The symbols are named “*śuṭhiḡhasvaḥ*” “*jīvātidaḥ*” “*cuḍhācīpūḥ*” “*niticata*” etc. The first letter in each symbol indicates the total no. of words in an *anuvāka*, the second indicates the no. of words occurring with *visarga* and “n”, the third indicates the no. of words occurring with *avagraha* and *iti*, in the word text, the fourth indicates the number of words ending with *m*, *k*, *t*, *ṭ*, *n*, and *ṇ*, the fourth letter also indicates the number of words ending with “*si*” and “*tu*” provided the corresponding symbol ends with *visarga* e.g. in *śarmāsi* (VSM.i-14) etc. The words ending with “*si*” are eight; those ending with “*tu*” are five. Thus the total number becomes thirteen which is indicated by , the fourth letter “d” of the symbol “*jīvātiduḥ*”. Ending with *visarga*, the symbol indicates an odd number and without *visarga*, it indicates either an even number or the zero number (of word ending with “*si*” and “*tu*”) e.g. the symbol “*ghadhajhaca*” not ending with *visarga* for “*vasoḥ pavitram*” (1.2) having only one word ending with “*si*” and only ending with “*tu*”. Thus the total number becomes two, which has been specifically mentioned in the *śikṣā* after the above symbol.

An even number of words ending with “*si*” and “*tu*” is always specifically mentioned after the symbol.

(i) The method of calculation:

The sphere of calculation is between “*k*” (क) and “*h*” (ह). The total number of consonants from “*k*” (क) to “*h*” (ह) is thirty three. Hence “*k*” indicates one, “*kh*” two, “*g*” three, “*gh*” four “*c*” (च) six etc. e.g. in the symbol “*guṭhiḡhasva*” “*g*” in “*gu*” indicates three and (उ) “*ṭh*” in “*ṭhi*” indicates twelve. The symbols generally use a conjunct consonant to indicate a high number e.g. “*jīṇvithaduḥ*” for “*kavyavāhanāya*” (ii.29)

where “*n*” (ॢ) indicates five. “*v*” (ॣ) twenty nine, hence the conjunct “*nv*” indicates the total number thirty four.

The symbols use only ten vowels (with the exception of “*i*” (ऋ) and “*ī*” (ॠ) the first letter in each symbol uses one of the ten, while the second, third and the fourth exclude “*a*” (अ) and use one of the remaining nine vowels. In other words in the first letter one calculates from “*a*” and in the rest three letters from “*ā*” (आ) e.g. in “*guthighasvah*” “*u*” (उ) in “*gu*” (गु) indicates five but “*i*” (इ) in “*thi*” (ठि) indicates two (not three).

Further, “*a*” (अ) in the second, third and the fourth letters, i.e; “*a*” (अ) in “*gha*” (घ) of the above symbol indicates zero. To indicate a number higher than nine (usually in the second, third or fourth letter) the author puts a *repha*-sign above the vowel e.g. the fourth letter “*rhi*” with the *repha*-sign in the symbol for “*upaprayantaḥ*” (iii.11) indicates twelve (*repha*-sign 10+“i”2=12).

Among all the symbols of the *vedaparibhāṣāsūtra śikṣā* there are only two *rephas*:

- a) “*herhayārṇa*” for *samudrāya* (xxiv.21)
- b) “*phautvirdarśiḥ*” for *sahasraśr̥ṣāḥ* (xxxi.1)

The number indicated by *repha*, 10+ the number of vowels in the second, third or fourth letter, 9=19. But, to indicate a number higher than nineteen (usually in the second, third, or the fourth letter) the author puts the *anusvāra* sign above the vowel. e.g.- the symbol for *yā oṣadhiḥ*, (xii.75), has *anusvāra* above the vowel. “*o*” of the fourth letter. The total number is 15+8=23, where *anusvāra* indicates 15, O indicates 8.

- i) **The number of words in an *anuvāka*:** The number of words in an *anuvāka* is known by the following process. Multiply the number of consonants in the first letter of the symbol by ten. Then add to the resultant, the number of the vowel in the first letter. The final resultant number thus obtained, gives the number of words in an *anuvāka* e.g the symbol “*ñābhudhudhiḥ*” for “*ādade*” *dhvarakṛtam* (i.24) where the consonant “*ñ*” (in the first letter of the symbol) indicates ten; multiplied by ten, it gives the resultant number “hundred” to which the number of the vowel “*ā*” (i.e.2) in the first letter “*ñā*” has been added. The final resultant number thus obtained in one hundred and two ($10 \times 10 = 100$, $100 + 2 = 102$), which is the exact number of words in the above *anuvāka*.
- ii) **The number of *visargas* in an *anuvāka* :** It is indicated by the consonant in the second letter of the symbol, e.g. the consonant “*bh*” in the second letter “*bhu*” of the symbol “*ñābhudhudhiḥ*” indicates twenty and this is the exact number of *visargas* in the *anuvāka ādade dhvarakṛtam* (i.24).
- iii) **The number of words ending with “*m*” in an *anuvāka* :** It is indicated by the consonant in the fourth letter of these symbols, e.g. the consonant “*dh*” in the fourth letter “*dhi*” of the above symbol, indicates nineteen and this is the exact number of words ending with “*m*” in the above *anuvāka*.
- iv) **The number of words ending with “*n*” in an *anuvāka* :** It is indicated by the vowel in the second letter of these symbols e.g. the vowel “*u*” in the second letter of “*bhū*” the above symbol indicates four and this is the exact number of words ending with

- “n” in the above *anuvāka*.
- v) **The number of words ending with “iti” in an *anuvāka*** : It is indicated by the vowel in the third letter of these symbols e.g. the vowel “u” in the third letter of “*dhu*”. The above symbol indicates four and this is the exact number of words ending with “iti” in the above “v” *anuvāka*.
- vi) **The number of words ending with “k” “t” “ṭ” “p” “ṇ” and “ṅ” in an *anuvāka*** : It is indicated by the vowel in the fourth letter of these symbols. e.g. the vowel “i” in the fourth letter “*dhi*” of the above symbol indicates these which is the exact number of words ending with “k” “t” “p” “ṭ” “ṇ” and “ṅ” in the above *anuvāka*.
- vii) **The number of “avagrahas” in an “*anuvāka*”** : It is indicated by the consonant in the third letter of these symbols, e.g. the consonant “dh” in the third letter “*dhu*” of the above symbol indicates fourteen and this is the exact number of “avagrahas” in the above *anuvāka*.
- viii) In calculating the number of *visarga* in an *anuvāka* only three types have been approved.
- i) *visarga*, in the interior of a word, e.g. *duḥsahau* (2)
 - ii) *visarga* in “avagraha” i.e. after “iti” e.g. “*duḥsahau*” “*iti duḥsahau*”.
 - iii) *visarga* at the end of a word, e.g. *vāyavaḥ*.
- ix) In calculating the number of words ending with consonants in an

anuvāka, only three types have been approved:

- i) consonant (any one of “k” “t” etc.) in an “*avagraha*” i.e. after “*iti*” e.g. the consonant “ṇ” (ण) “*in vṛṣaṇvasu*” “*iti vṛṣaṇvasu*”
- ii) consonant at the end of a word e.g. the consonant “t” (त) in “*avardhayat*”.
- iii) consonant ending with “*si*” “*tu*” and “*se*”
 - a) in an *avagraha*, i.e. after “*iti*” e.g. *yātudhānā, iti yātu dhānā (tu)*
 - b) at the end of a word e.g. *punātu (tu)*

The following eight consonants viz. “k” “t” “ṭ” “p” “ṇ” “ñ” and “m” occur both in *avagraha* and at the end of words. Out of these eight, the first and the last occur very often at the end of words.

(*prathamottamāḥ padāntīyā ac nau*) This *sūtra* of *Vāj.Prāt.* has been quoted by the author in this treatise. Hence the present treatise seems to be later, in its date than *Vāj.Prāt.*

III.2.(xix) *Samketabodhikāśikṣā*

This is the latest among the *śikṣās* belonging to the white *yajurveda*. It explains the devanāgarī orthographic symbols used in the *Vaj.Sam.* Its author is Amarnath Sastri, son of Gangadhar Sarma and Valli Devi both belonging to the Sārasvata Brahmin family. It was composed in the year 1986 (vi sam) in the city of Fatehpur for the benefit of the students of Sakambarī Sanskrit College. The symbols as they have been explained by the author of this treatise are as follows:

- i) A vertical stroke above a letter, indicates the circumflex accent
gaṇānām tvā gaṇapatim गुणानां त्वा गुणपति॑ (xxiii.19)
- ii) A horizontal stroke below a letter indicates the grave accent e.g.
garbhadham गर्भ॒धम् (xxiii.19)
- iii) A letter without any mark, after the *anudātta*, indicates the acute accent e.g. *gaṇānām* गुणानां॑ (xxiii.19)
- iv) A letter without any mark, after the *svarita*, indicates the *pracaya* accent, e.g. *nām tvā* नां॑ त्वा (xiii.19)
- v) The sign “ω” below a letter indicates the *purnanyubja svarita*, e.g. (*prasavesvino*) प्र॑स॒वे॒स्वि॒नो (1-10)
- vi) The sign "L" below a letter indicates the *ardhanyubja svarita* e.g. *vedo'si* (वे॒दोऽ॑सि)¹⁴
- vii) A horizontal line between the two points of *visarjanīya* indicates the *ubhakṣepa svarita*, it is called “*pracita*” because it occurs after the *svarita* e.g. *devo-vah-savitā* (दे॒वो व ÷ स॒वि॒ता)
- viii) “*repha*” between the two points of the *visarjanīya* following the *udātta*, is called “*tāra*” which indicates “*tarjanikṣepa*” (egress of the index finger) e.g. *sahasrākṣaḥ* सह॑स्राक्षः (xxxi. 1).
- ix) An inverted “*repha*” between the two points of the *visarjanīya* following the *pracaya*, is called “*valika*” which indicates “*kaniṣṭhakṣepa*” (egrees of the little finger) e.g. *puruṣaḥ* पु॒रु॒षः (xxxi.1).

14. वेदोऽसि (ii.21)

- x) The moon-like spot (◡) followed by the numeral “2 1/2 or “1 1/2” indicates the *raṅga* vowel, e.g.
- a) *mahā* “2 1/2” *indrao* मुहूर्^२/ इन्द्रो^१ (vii.39).
- xi) The sign of “*avagraha*” between two vowels, indicates “*vivṛtti*” (hiatus) e.g. “*nābhyā*” *āsīda* नाभ्याऽआसीद... (xxxi.13).
- xii) The bow like spot (ॐ) indicates the light *anusvāra*, the same being followed by a conjunct consonant indicates the heavy *anusvāra* e.g.
- a) *yajurṁṣi* (यजू ॐ षि)(xxxiv.5) light *anusara*.
- b) सूर्य ॐ स्वाहा ॥ (vii.41)
- xiii) The letter ‘*ya*’ (य-य/य) with either a point or an oblique line in its center indicates its ‘*ja*’ pronunciation e.g. *yajñena yajñam* (xxxi.16) will be pronounced as *jajñena jajñam*/ यज्ञेन यज्ञम्.

The author has dedicated this treatise for the delight of *śrī* and *śrīnātha*.

III.2.(xx) *Pārāśarīśikṣā*

It names eight *śikṣās* viz. (i) *yājñavalkya* (ii) *vāsiṣṭhī* (iii) *kātyāyanī*, (iv) *gautamī*, (v) *māṇḍavī*, (vi) *amoghānandinī*, (vii) *pāṇinīya*, (viii) *mādhyandinī* (*pārā. śik. 77-78*). It professes itself to be the foremost among all *śikṣās*.

“Like the all pervading absolute among gods, like *puṣkara* among holy places, the *pārāśarīśikṣā* is eulogized in all scriptures”!

yathā deveṣu viśvātmā yathā tirthēṣu puṣkaram /

tathā pārāsarīśikṣā sarvaśāstreṣu gīyate // (SS.p-46)

According to the *caraṇavyūha*, (19) it belongs to the *parāśara* recension of the white *yajurveda*. But as it mentions almost all the important *śikṣās* of white *yajurveda*, it should be posterior to them. So far as its present form is concerned, although its kernel might have been much older. Besides *puṣkara*, it also mentions *kumbhīpāka* (SS.p-58) to which people mispronouncing Vedas are bound to go.¹⁵ It calculates the letter of each *kāṇḍikā* of the white *yajurveda* and describes the method of their pronunciation, some euphonic rules are also stated here and there without any order or arrangement. Some of its original contributions are:

- (a) The half long vowel (*kṣipra*): The vowels are divided as short, half-long, long and *ultra* long (*pluta* or *vṛddha*). Of these four varieties, the half-long or *kṣipra* is interesting and its quantity is one-half of that vowel. The *pārāsarīśikṣā* states that:

*kṣipraṁ dīrghaṁ samākhyātam aṅgulyām ekamantaram /
dīrghasyārdhaṁ bhavet kṣipraṁ nāsti dīrghasya dīrghatā //
yathā saṅkhyā tu dīrghasya tathā coṣmā prakīrtita/
ūṣmā dīrghaṁ samatvaṁ ca kṣipraṁ kuryāt tadardhakam //*

verse 26-27.

Which may be translated as “The *kṣipra* variety of the long vowel is said to be an interval of a snap of the finger; the *kṣipra* has one-half the quantity of the long vowel. A long vowel cannot be further lengthened (presumably referring to *sandhi* rules, in which two longs = one long).

15. *anyathā nirayaṁ yanti kumbhīpākaṁ ca dāruṇam*-verse 114- SS.p-57.

The number (of moras) of the fricative is said to be equal to that of a long vowel; half of its quantity should be taken as the *kṣipra*¹⁶

Thus in *pār ā śik.*, the quantity ascribed to the *kṣipra*, appears to be contradictory as it may be confused with that of a short vowel, which is also measured as one-half the quantity of a long vowel. The *śikṣā* further states that-

*mātrā saha bhaved dīrgham hrasvam mātrā vinā bhavet/
ityakṣaram vijānīyāt kṣipram dīrgham bhavēditi/* /verse-25.

With a mora added, the vowel becomes long, and with a mora reduced, the vowel becomes short (*hrasva*). Know this to be the quantity of a vowel. The *kṣipra* is a long vowel. The *śikṣā* does not give any examples of *kṣipra* but some other *śikṣās* give examples of slightly long vowel. The *keśavīśikṣā* says that in the *sarṇhitāpāṭha* of the *Vājasaneyī* School, a short vowel is pronounced slightly long. For example:

- a. *ī* in *īṣe tvorje-* will be pronounced slightly long.
- b. the short *a'* in *vāyava stha devaḥ/* will be pronounced slightly long.
- c. the *i* in *paśūn pāhi-* will be pronounced slightly long.

But when the short vowels are followed by a syllable containing a long *ā*, they are not lengthened as in the place of the 'a' and 'i' of Savitā, 'a' in 'ja' of *yajamānasya* etc. are not long.¹⁷

- b) "v" as the product of euphonic combination between

16. S. Varma-p.178.

17. *hrasvam kimcid dīrgham halyutākāre halvisargayugvarṇe ca na sarṇhitāyām keśavīśikṣā sūtra-9*; SS. p. 120

“au” and “a” is *laghutara* (lighter). This view of the *pārās. śik.*, was based on accurate observation of phonetic changes in Vedic Sanskrit and actual pronunciation of the sounds in the dialects as “v” which was the product of *samdhī* and subject to elision.

- c) *Pārās. śik.* observes that the intervocalic double ‘k’ in *kukkuṭa* should be pronounced double in contrary to the *Vāj Prāt’s* rule IV.144 which states this to be pronounced as *ekavarṇavad*:

i) *kukkuṭaḥ kāma-lubdho’pi kakāra-dvayam uccaret /*

evaṁ varṇāḥ prayoktavyāḥ kukkuṭo’si nidarśanam // verse-69

ii) *dvivarṇamekavarṇavaddhāraṇāt svaramadhye samānapade*

Vāj Prāt. IV, 144

For example:- *vyattam* (xxxi.22)

kukkuṭaḥ (i.16)

Towards the end, it gives a few didactic verses, which are very useful to the young students. It is a complete *śikṣā* and gives a large number of examples from the *ŚYV*.

III.2. (xxi) *Amoghanandinīśikṣā*

It is composed on the same lines as *Yāj. & Pārās. śik.* but to some extent, its object seems to have been similar to that of *māṇḍavī śikṣā* for it gives a list of words with an initial-labiodentals. “v” and another with the labial plosive “b”. Besides this, it deals with the following topics.

- a) The letters, which appear in their short longer forms in the *sarṇhitā*.

- b) The change of a short letter into a long one if it occurs in the *pāda* text.
- c) The three different pronunciation of “va” (*guru*, *laghu* and *laghutara*) 26-29.
- d) The characteristics of *nāda* and *anunāsika* with examples 30-43
- e) The five kinds of *raṅga*. 44-onwards.
- f) Enumeration of the seven *plutas* in *VSM*- verse 47.
- g) The method of pronunciation of letters 50 onwards.

The letter “r” here is designed as *mṛdu*, for it is neither doubled nor conjunct. It is always heavy at the end of a sentence. In this context, it quotes Śaunaka, it also contains many interesting didactic verses.

III.2.(xxii) *Laghu-amoghanandinīśikṣā*

This is a small treatise containing 17 *kārikās*. The verse 13 speaks of the *sūtrakāra kātyāyana*. Hence it is later than the *Vāj Prāt*. It deals with the following topics.

- i. Rules regarding the pronunciations of “y” (1-9)
- ii. Rules regarding the pronunciations of “v” (19-14)
- iii. Rules regarding the pronunciations of *anusvara* in different moras (14-16)

The conditions under which “y” is pronounced as “j” and as “*iṣatsprīṣṭa*” and those under which *anusvāra* is pronounced in different moras are defined with sufficient illustrations.

III.2.(xxiii) *Mādhyandinaśikṣā*

There is no sufficient evidence to identity the author of this work with the sage Mādhyandina, who is known as the preceptor of the one of the schools of the *VSM*. The work begins with the well-known verse, which states that the *mantra* should be pronounced without any fraction or elision of accent pitches and letters respectively. It deals with the following topics. It states first the verse *mantrohīnaḥ svarato varṇato vā* etc. Then-

1. Doubling of letters (1-7)
2. Enumeration of the velar “*kh*” sounds which have been estimated to number 29.

atra kavargīyakhakār ā nirdiśyante / 9-29.

3. Enumeration of the repeated *ṛk* portions, which have been estimated to number 1975.

*“evam catuṣṣaṣṭhyuttaraśatam lopāḥ /
ekādaśottaramaṣṭādaśaśataissaḥeti //”*

III.2.(xxiv) *Laghu mādhyandinīśikṣā*

This is an abridged from of the *mādhyandinīśikṣā*. It contains 28 *kārikās*. Verses 1-14. lay down the same rules as given in the *keśavī śikṣā*. The subjects described here can be classified under the following section.

1. Euphonic combination (1-15)
2. *ayogavāha* (16-22)
3. Indications of accents by fingers (22-28)

In the first section, only some of the important euphonic changes are defined. They are:-

1. The changes of “sa” (1)
2. The changes of “ya” (2-6)
3. The three kinds of “va”-*guru* (heavy) *laghu* (light) and *laghutara* (ligher) and their application. (7-9)
4. Alternation of *r* and *l* (10-11)
5. Three kinds of *anusvāra* (*hrasva*, *dīrgha* and *guru*) and their application (12-15).

III.2.(xxv) *Yājñavalkyaśikṣā*

It is the most complete among the *śikṣās* of white *yajurveda*. Tradition ascribes the authorship of *Yājñavalkya* to it. Verma, however, dissents from this view and rejects the authorship of *Yājñavalkya* because his name appears three times in the body of this treatise.¹⁸ By an internal evidence, he attributes the authorship of this work, in its latest form, to Soma Sarma. Paṇḍit V.Venkat Ram Sarma objects to this view and observes:-

“Siddhesvara Varma has pointed out among so many other things that the *Yājñavalkyaśikṣā* is a much later work; its author is one Soma Sarma and not *Yājñavalkya*; his date should not be earlier than 5th century A.D. and later than the 10th century A.D. He has also said that in several instances this *śikṣā* quotes the *kātyāyana prātiśākhya*. So these evidences and similar other conclusions of Varma are merely his own imaginations and have little value”.¹⁹

Sharma finally states that *yājñavalkyaśikṣā* is older than *kātyāyana*

18. *varṇo jātiśca mātṛā ca gotraṁ chandas ca daivatam /
etat sarvaṁ samākhyatam yājñavalkyena dhīmatā ||*

19. Venkatarama sarma, V. *Critical studies on Kātyāyana's śuklayajurvedaprātiśākhya*, Madras, University, Madras, p-82

prātiśākhya, because *kātyāyana* quotes some passages from *yājñavalkya śikṣā*.²⁰

Thus Varma and Sarma give two opposite views on the priority of the *Yāj. śik.* to the *Vāj. Prāt.* From the available data, it is difficult to determine which of them is earlier. Besides *Yājñavalkya*, this *śikṣā* also quotes other authorities such as Soma Sarmā, Āpastamba, Mādhyandina and Śaunaka (*yāj. śik.* 11.2.40; 11.3.77)

From this it may be presumed that the *yāj. śik.* in its present form is posterior to the *Bṛhaddevatā* and *Ṛk. Prāt.* Both being attributed to Śaunaka. The date of the *Bṛhaddevatā* according to Macdonel, is anterior to the Sarvānukrama and posterior to the *Nirukta*. Hence, the *yāj śik.* is probably latter than *Ṛk. Prāt.* the *Nirukta* and *Bṛhaddevatā*.

Kielhorn identifies the *yāj. śik.* with the *kātyāyanīśikṣā*, although the two are recognized to be different works by most of the authorities. In some Mss., the *yāj śik.* is designated as the *Bṛhatśikṣā*. Both as regards its contents and the number of *śloka*s, this treatise resembles the *Māṇḍuki* more than other *śikṣās*.

The *yāj śik.* in its extant form is available in four different editions. Among these, the first, by Pandit Jvalā Prasad Misra (Bombay, vi.sam.1959) has been edited with a hindi translation; the second by Pandit Viśvanāth Sarma (Dehradun, vi sam.1973) has a commentary named *śikṣāśloka*; the third, by Pandit Yugal Kisore Vyās which occupies the first place in the ŚS (Banaras, 1989 A.D.) and the fourth perhaps, the best and the latest one, comes from the hand of Sri Amarnath Sastri along with an exhaustive commentary named *śikṣāvalli*. The *yāj. śik.* occupies

20. *Op. cit.* p-84

the first place in the ŚS. on account of its importance and superiority over other śikṣās. It bears the same relation to the *Vāj.Prāt.* as does the *Vya.śik* to the *Taitt. Prāt.* It deals with all most nearly all the phonetic topics elaborately.

The *yāj.śik.*, attributed to the celebrated sage *Yājñyavalkya* pertains to all the recensions of ŚYV and is the most complete one among the Śikṣās of ŚYV. Sage *Yājñavalkya* obtaining the *Yajurveda* from the God *Surya*, taught the same to 15 disciples named *Mādhyandina* etc. So in this Śikṣā also all the principles of pronunciation and recitation of Vedic mantras relating to all the recensions are to be found.

This Śikṣā contains two *prakaraṇas* entitled as “*svaraprakaraṇam*” and “*varṇaprakaraṇam*”. Each *prakaraṇa* contains various topics.

For Example:- “*Svaraprakaraṇa*” consists of four following divisions

- i. *mātrādhikāraḥ.*
- ii. *adhyayanavidhyadhikāraḥ.*
- iii. *hastacalana vidhyadhikāraḥ.*
- iv. *svarasamhitāvidhyadhikāraḥ.*

In the *varṇaprakaraṇa* five subjects are dealt with as follows:

- i. *varṇadevatādyadhikāraḥ.*
- ii. *sandhyadhikāraḥ.*
- iii. *varṇoccāraṇādhikāraḥ.*
- iv. *padādhikāraḥ.*

v. *prakīrṇakādhikārah.*

In the above *adhikāras* various subjects have been analysed some of which are follows. In the *mātrādhikārah*, the pitch accent like *udātta* etc. have different colours as white etc. These accents are also predominated by different deities as Agni etc. The *jāti* of different accents like Brāhmaṇa etc., their *gotras* like Bharadvāja and the *chhandas* relating to different accents are also determined. After that the seven *svaras* starting from “*Ṣaḍja*” are described here as belonging to three pitch accents as follows:

gāndharvavede ye proktāḥ saptaṣaḍjādayaḥ svarāḥ
ta eva vede vijñeyāstraya uccādayaḥ svarāḥ /
uccau niṣādagāndhārau nīcāvṛṣabhadhaivatau
śeṣāstu svaritā jñeyāḥ ṣaḍjamadhyamapañcamāḥ //verses- 6-7

In this context the process of reciting the different *svaras* like ‘*ṣaḍja*’ etc. are also depicted in this *Śikṣā*. Moreover while uttering the *mantras*, the principles relating to various *moras* along with the time of the utterance of different *moras* have been instructed.

An interesting feature of this *Śikṣā* relates to the principles regarding the recitation of Vedas. In this context, the placement of different limbs of the body during the recitation of *Vedic mantras* has been determined. The different possible blemishes or faults during the utterance of *varṇas* are hinted upon. An estimation of the person having qualities for perfect utterance of *mantras* as well as the determination of his disqualification of perfect utterance is also found in this *Śikṣā* text. The reward for the recitation of *Vedic mantras*, brushing of the teeth by the sticks of specific trees like khadira etc are also advised in this *Śikṣā*. The verbal recitation of *Vedic mantras* without specific hand movement

is considered here as faulty. The seven blemishes of hand movement, the harmony of hand movement and vocal utterance and various *vṛttis* of recitation of *mantras* have been instructed here.

In the third *adhikāra*, which relates to the principles of hand movement, the specific rules for the movement of finger have been determined. While showing the different pitch accent the different types of “*hastanyāsa*” have been enumerated in this text.

In the fourth *adhikāra* which is related to *svārasamhitāvidhi*”, the definition and the examples of eight types of svaritas like *jātya* etc have been described.

In the “*varṇaprakaraṇa*” the deities relating to different *varṇas* have been enumerated. After that the *varṇa*, the *gotra* and the deity of four types of *padas* like *nāma*, *akhyāta*, *upasarg*, and *nipāta* have been enumerated. In the second *adhikāra*, which is known as *sandhyādhikāra*, the following subjects are discussed.

1. Four types of *sandhi* along with their examples
2. The nature of *vivṛtti*, in the *prakṛtibhāva sandhi*.
3. Four types of *vivṛtti* like पिपिलिका “Pipilika” etc.
4. The nature of *svarabhakti* along with the example in the *ŚYV*
5. In this *adhikara* the speciality of “य” and “व” is mentioned as follows.

*bakārastrividha prokto gururlaghulaghūtara
ādaḥ gururlaghurmadhye padānte ca laghūtara /
yavarṇastrividha prokto garurlaghulaghūtara
ādaḥ gururlaghurmadhye padānte tu laghūtara //*



By this verse the specific places have been showed where the syllable “य” is to be pronounced as long, short, shorter. The three types of “वकार” are also found mentioned here.

In the third *adhikāra* of *Varṇoccāraṇavidhi* the local tradition relating to ह कार is mentioned and after that the nature of *raṅga* in the context of utterance of *varṇas* along with its various divisions and examples have been determined. In the fourth *adhikāra* the speciality of utterance of *padas*, the praise of the trained reciters, censure of the faulty reciters, the significance of *laya*, *sāma* etc. have been discussed. The yama letters, their numbers along with the examples are enumerated in the fifth *adhikāra*. In this *adhikāra*, the interesting advises have been imparted as to the principles of study for the increase of memory power and for the need for a worthy teacher. More over, it is stated here that the instruction of the teacher is to be accepted only if it is justified but not because of the words of the teacher. Thus the *Śikṣā* concludes.

*yuktiyuktam vaco grāhyam na grāhyam gurugauravāt /
sarvaśāstrarahasyam tad yājñavalakyena bhāṣitam //*

yāj. śik verse-232

CHAPTER-IV

COMPARATIVE ANALYSIS OF *ŚUKLAYAJURVEDIC ŚIKṢĀS*

CHAPTER-IV

COMPARATIVE ANALYSIS OF ŚUKLA YAJURVEDIC
ŚIKŚĀS

IV.0 Basis for the Analysis

At the outset it may come to one's mind why so many śikṣās are related to the ŚYV, when one śikṣā text may explain the principles relating to *svara*, *varṇa* and the manner of utterance etc. The answer to this question lies in the fact that the utterance of vedic *mantras* and the Vedas themselves is very mystic. So different śikṣā texts explain the intricacies which have been left out or not dealt with in other śikṣā texts along with the general rules. In this manner a number of śikṣā texts are to be found associated with the ŚYV. But the śikṣā texts do not consider or explain all the subjects, rather there are certain topics which are common to most of the śikṣā texts along with some specific subjects of discussion. The analysis of ŚYV. śikṣās are being done here as per the following three aspects:-

- 1) Points of similarities
- 2) comparative analysis of the similar subjects dealt upon by various śikṣās
- (3) specific peculiarities of the śikṣās

IV.1 Points of similarities

IV.1.(i) Enumeration of the alphabet

Like *Pāṇ. śik.*, one will find in *varṇaratnapradīpikā śikṣā* 63 letters. But the speciality of this text is that the *Pāṇ. śik.* enumerates 64

letters accepting प्लुतलृकारः as one letter. But pluta / is not mentioned here.

Śoḍaśaślokī śikṣā mentions the / as the fifth vowel. In this *śikṣā*, the number of vowels, the number of consonants, the number of yama letters, the divisions of vowels into *hrasva*, *dīrgha*, and *pluta*, the accents like *udātta*, *anudātta* and *svārīta*, the nasalisation of vowels and the vowels without nasalisation are found detailed enumeration. The places of utterance of consonants are also enumerated in this *śikṣā*. In the *Yāj.śik.*, the list of letters has been divided into four categories: *svara* (vowel), *sparśa* (stop), *antahstha* (semivowel) and *uṣma* (aspirant). Along with this the *anusvāra*, the *jihvāmūlīya*, the *upadhmānīya*, the *nāsikya*, the *anunāsikya* the *raṅga*, and the yama letters are also mentioned. Though the number of letters in each category has not been mentioned, still it is important as it mentions 68 *varṇas* altogether as accepted by the *śikṣākāras*. In the *Pāṇ. śik.*, twentytwo *svaras* have been enumerated. Only by including long 'I' their number becomes twentythree.

The various categories of alphabet found in the *śikṣās* of ŚYV may be listed as below.

- i. *svara* (vowel)
- ii. *vyañjana* (consonants)
 - a) *sparśa* (stop)
 - b) *antahstha* (semivowels)
 - c) *uṣma* (aspirant)
 - d) *anusvāra* (the nasal sound preceding a vowel)
 - e) *jihvāmūlīya* (the *visarga* pronounced before 'k' and 'kh' when uttered from the root of the tongue)

- #### IV.1.(ii) Enumeration of *Sandhis*

IV.1.(iii) Enumeration of accents

Certain *śikṣās* predominantly center round the instruction on the accents only. For example the *Svarāṅkuśa śikṣā* has declared at the beginning that-

*herambam caṇḍikām dhyātvā śambhum sūryam hariṁ gurum/
sarasvatīm kavivarān vakṣe 'ham svaranirṇayam//*

Concentrating on Heramba, Caṇḍikā, Śambhu, Sūrya, Hari, the preceptor, Sarasvati and the famous poets, I shall speak on the determination of accent.

Accordingly it deals with the *udātta*, *anudātta*, *svarita* and *pracaya* accents. *Pracaya* (is the accumulated accent occurring in a series of unaccented syllables following a *svarita*-circumflex). The particulars about *kampitasvara*, *jātyasvara*, *abhinihitasvara*, *kṣaiprasvara*, *praśliṣṭasvara* are also enumerated here basing upon different types of *sandhis*. *Jātya* is the name of the *svarita* accent resulting in a fixed word from an *udātta* originally belonging to a preceding 'i' or 'u'. *Kampitasvara* causes to tremble or *vibrate* the tone while uttering the vowel. *abhinihitasvara* is the accent of the *sandhi* between the final 'e' and 'o' with the initial 'a' suppressed. *Praśliṣṭa* is the *sandhi* of *a/ā* with *a/ā*, *i/ī* with *i/ī*, *u/ū* with *u/ū*, *r/ṛ* with *r/ṛ*, the result being the long form of the same vowel as *ā/ī/ū/ṛ*.

IV.1.(iv) Enumeration of *virāmas*

In the *RV*, the *virāmas* are determined by the *ardharca* (half of a *rk* stanza) but as the *YV* contains prose portions, the *virāmas* or the ends of the lines are to be indicated. The numbers of all the *virāmas* have been mentioned in certain *śikṣā* texts. *Avasānanirṇaya śikṣā* is of such type which declares at the outset that:-

avasānam tu vakṣāmi yathāvanupūrvaśah //2// or the closing mark shall rightly say in due order.

In this śikṣā, in the *yajuṣ* where the closing marks or *virāmas* are to be done, have been instructed. The word *avasāna* has the same meaning as *virāma*. The numbers of all the *virāmas* are also compiled here as follows:-

sarvāṇy avasānāni ekīkṛtya ekonaviṁśati satāni pañca saptaṭiḥ samkhyā- By uniting all the closing marks, the number will be nineteen hundred and seventy-five(1975).

IV.1.(v) Repetition of *Ṛk. mantras* in the *YV*

Some śikṣās enumerate mainly the repetition of “*ṛks*” in *YV*. The repeated “*ṛks*” which are generally seen in each chapter of *Yajurveda* are called “*galitā*”.-

yathā atra śikṣāyaṁ ca etadeva parigaṇitam yad yajurvedasaṁhitāyāṁ pratyadhyāyaṁ kiyatyaḥ kṣāca ṛco galitā arthāt atikramaviṣayabhūtāḥ keṣu keṣu ca adhyāyeṣu galitāyā ṛco 'bhāva iti vivecitam//

For instance, in this śikṣā it has been calculated that some unimportant *ṛks* have been dropped, i.e they have been treated as excessive. Therefore it is discriminated that in certain chapters there is the absence of the dropped *ṛks*.

As the name suggests the *Galadṛkśikṣā* enumerates the *ṛk mantras* which are found in *YV*. In this śikṣā the main subject is the enumeration of how many *ṛk mantras* are found mentioned in each chapter of *YV* and in which chapters of *YV* such *ṛks* are not to be found. When the *mantras* of *ṚV* come for the first time in *YV*, they are to be uttered completely. But when the same *mantra* occurs for the second time, then only the *pratīka*

or the first two/three words of that *mantra* are to be uttered followed by the next *mantra*. Such order is enjoined in *Vāj.Prā* as *saṁhitāyām* etc. This *śikṣā* is significant for the retention of *ṛk* *mantras* as well as the knowledge about how many *ṛks* are enumerated in *Yajurveda*.

IV.1.(vi) Placement of *udātta* accent in the word

Śikṣās deal with enumeration of words having *udātta* accent in the beginning or middle or at the end. It is interesting to note that certain *śikṣās* record the words which are found in *ŚYV* having *udātta* accent as per their placement on the words. The *manaḥsvāra śikṣā* records the *Yajuṣmantras* which have *udātta* accent on their first letter, the word having *udātta* accent on the middle letter and also the word having *udātta* accent on the last letter. Thus this *śikṣā* text forms an aid for the purity of the accent of the vedic texts.

So also the word having *na* as its ending letter and *ta* as its ending letter and the *avasānas* or *virāmas* in the *Yajuṣmantras* are also found mention in the *manaḥsvāra śikṣā* like the *avasānanirṇaya śikṣā*.

In the *Yajurvedasaṁhitā*, there are some *ṛks* composed by three feet and some by four feet. In this *manaḥsvāra śikṣā* it is ascertained, how many *ṛks* are there and how are they like. Besides, the number of full stops has also been ascertained.

IV.1.(vii) Enumeration of *kramas*

The *kramasandhānaśikṣā* and the *kramakārikāśikṣā* enjoin the rules about the order or *krama* relating to *avasānas*. The first verse of *kramasandhānaśikṣā* states-

yathā samāmnātām kramāvasānām saṅkrameṣu /
kramaśāstrānusāreṇa sandhānām procyate'dhunā //

In the meeting of two words in *krama* texts, as the end of a word in the *kramapāṭha* has been repeated, therefore now according to the treatise dealing with the *kramapāṭha*, the act of joining the word together is being spoken.

Thus as per this *śikṣā* in the *saṁhitāpāṭha*, where there are *avasānas* in the *mantras*, these *avasānas* are to be done as per a particular order. But in certain places though there is *avasāna* in the *saṁhitāpāṭha* it becomes conjoined with the next word in the *kramapāṭha*. In the *saṁhitāpāṭha*, the *avasānas* come at the *ardharca*. But in *kramapāṭha* the last word of the first half of a *ṛk* becomes conjoined with the first word of the next hemistich. Those cases are enumerated in this *śikṣā*. The *kramakārikā śikṣā* records the same at the outset as-

sarvayājūṣamantrāṇām vede vājasaneyake /
kramāvasānaviṣayām kārikāmārabhāmahe //2//

In the *Vājasaneyā saṁhitā* i.e in the white *Yajurveda*, we now begin the *kārikā* (concise statement in verse) dealing with the need of a word in the *krama* text of all the *Yajuṣ mantras*.

IV.1.(viii) Enumeration of *svarabhakti*

Some *śikṣās* give stress upon the enumeration of *svarabhakti*. For example, the *svarabhakti lakṣaṇa pariśiṣṭa śikṣā* enumerates five kinds of *svarabhakti* along with their examples as follows-

svarabhaktiḥ pañcadhā syāt tatrādyā karinī smṛtā /

rakārasya hakareṇa samyogo yatra jāyate

karinī sā tu vijñeyā barhiraśīti darśanam // verse-36

svarabhakti is vowel separation. It is a vowel sound phonetically inserted between *r* or *l* and a following consonant (e.g. ‘*darśana*’ being equal to *daraśana*). *Svarabhakti* is of five kinds among them the first one is called ‘*karinī*’. It takes place where there is combination of ‘*r*’ with ‘*h*’. e.g. *barhirasi* (*r+h*)

The second one is called *kurviṇī* where there is combination of ‘*l*’ with ‘*h*’. e.g. ‘*upavalha*’ (*l+h*)

lakārasya hakāreṇa samyogo yatra jāyate /

kurviṇī sā hi vijñeyā upavalheti paśyati //

verse-37 of *svarabhakti lakṣaṇapariśiṣṭa śikṣā*

rakārasya śakāreṇa saṁyogo yatra dṛśyate /

hariṇī sā tu vijñeyā rśasa' ityādi darśanam // Ibid, verse-38

The third one is called *hariṇī* where there is a combination of ‘*r*’ with palatal ‘*ś*’. e.g. *arśasa* (*r+ś*).

lakārasya śakareṇa saṁyogo yatra jāyate /

taṁ hariṇīm vijñānyāt śatavalśeti darśanam // Ibid, verse-39

The fourth one is called *hariṇī* or *hāritā* (Yāj.Śik-101) where there is a combination of ‘*l*’ with palatal ‘*ś*’ e.g. *satavalśa* (*l+ś*)

rephasyātha śakareṇa saṁyogo yatra dṛśyate /

hamsapadeti vijñeyā varṣo varṣīyasīti ca // Ibid, verse-40

The fifth one is called *hamsapādā* where there is a combination of 'r' with cerebral 'ṣ' e.g. *varṣaḥ* and *varṣīyasī* (r+ṣ)

etat lakṣaṇamākhyātām svarabhaktervicakṣanaiḥ / *Ibid*

The experts have spoken of this definition of *svarabhakti*. Thus the last six verses of the *svarabhakti*lakṣaṇa śikṣā explain the rules of *svarabhakti* which are evidently the reproductions from the *yajñavalkyaśikṣā* (verses 98-104). *Vāj Prāt* IV.7 and *Atharva Prāt.* 1-102 maintain that the fricative before which *svarabhakti* occurs is not followed by a consonant but is followed by a vowel. Thus in the word *pārśvataḥ*, though there is the conjunction of r+ṣ but as 'ṣ' is followed by 'v' which is a consonant and the *svarabhakti* does not occur.

IV.2.0 Comparative Analysis of ŚYV śikṣās

A comparative analysis of ŚYV śikṣās is furnished below:-

- (i) *Varṇaratna pradīpa śikṣā* is older than *Prātiśākhya pradīpa śikṣā*.
- (ii) Though Amar the author of *varṇaratna pradīpa śikṣā* has followed the general rules of *Prātiśākhya* yet he has arranged the rules in his own order. He did not follow the order of *Prātiśākhya* although it mostly defines the sūtras of *Prātiśākhya* section by section with illustration.
- (iii) *Varṇaratna pradīpa śikṣā* states that the recitation of vedic texts precedes and clarifies the understanding of accentuation and euphonic combination. But *Prātiśākhya pradīpa śikṣā* defines the method of studying Vedic texts and persons unfit to study the Vedas without the prior knowledge of the rules of *śikṣā*.

- (IV) *Varṇaratna pradīpa śikṣā* deals with the enumeration of letter explanation of technical terms such as *jit*, *dhi*, *ut*, *kaṇṭhya*, *sim*, *bhāvi* and *upadhā*. But *Prātiśākhya pradīpa śikṣā* deals with rules of vowel-combination, consonant combination, *visarga* combination and cerebralisation of *s* and *n*.
- (V) *Varṇaratna pradīpa śikṣā* mainly specifies *aṇu* and *paramāṇu* including *hrasva*, *dīrgha* and *pluta*, but *Prātiśākhya pradīpa śikṣā* deals mainly with acute, grave and circumflex accent.
- (VI) *Pracaya* accent plays a special role in *Prātiśākhya pradīpa śikṣā*, but in *Varṇaratna pradīpa śikṣā*, *sthāna*, *karaṇa* and *prayatna* are clearly explained.
- (VII) *Varṇaratna pradīpa śikṣā* informs us rules of syllabic division (*pūrvāṅga*, *parāṅga* *carcā*) but *Prātiśākhya pradīpa śikṣā* gives the description of eight *vikṛtipāthas* (fictitious recitations such as *jaṭā*, *mālā*, *śikhā*, *rekhā*, *dhvaja*, *daṇḍa*, *ratha*, and *ghana* and it also gives detailed description regarding the pronunciation of 'r', 'y', 'v' and 's'.
- (VIII) *Varṇaratna pradīpa śikṣā* estimates the relative strength of vowels but *Prātiśākhya pradīpa śikṣā* deals with the vowel lengthening.
- (IX) Rules of euphonic combination like *lopa*, *āgama*, *vikāra* and *prakṛtibhāva* play a predominant role in *Varṇaratna pradīpa śikṣā*. But *Prātiśākhya pradīpa śikṣā* gives more stress on different manual gestures. It provides more

information about *avagraha*, *samkrama*, *krama text*, *krama sandhāna* and *svarabhakti*.

- (X) *svarabhakti*lakṣaṇa *pariśiṣṭaśikṣā* is ascribed to *Kātyāyana*. It mainly describes different kinds of *svarabhakti* in the last six verses and these are evidently the reproductions from *Yājñyavalkya śikṣā*. *Prātiśākhya pradīpa śikṣā* deals with one section in *svarabhakti* whereas *Varṇaratna pradīpa śikṣā* deals with some euphonic combination and its classification, specially discussing the syllabication of *svarabhakti*.
- (XI) *Krama sandhānas* have been collected in the *samkramas*. *Samkrama* is defined as combination of re-occurring words with the non-recurring words. But in *svarabhakti*lakṣaṇa *pariśiṣṭaśikṣā*, the uses of *pratyāharas* are mainly found but *kramapāṭha* denotes the joint recitation of the two words.
- (XII) There are mainly 1975 repeated *ṛks* in the *VSM*. *Galadṛk śikṣā* mainly concentrates on repeated *ṛks* but there are altogether 115 *kramasandhānas* seen in *VSM*. *Kramasandhānaśikṣā* discusses about those *sandhānas*. *Galadṛk śikṣā* is very significant from the point of view of text representation.
- (XIII) *Manahsvāra* gives sufficient stress on *svara* but other aspects like *vala*, *mātrā*, *sāma* and *santāna* are not dealt upon. But *Mallaśarma śikṣā* mainly deals with the manual gestures for accents. It plays a very specific role like *Yāj. śikṣā* for dealing with the vast subject so elaborately like general rules, *mūlasthāna catus-svaragati*, egressing of fingers, definition

of *anunāsika*, treatment of *kṣaipra* etc. But *svarāṅkuśa śikṣā* is a small treatise containing only 25 verses, a minor treatise defining the rules of accentuation and of euphonic combination. Regarding, the authorship of the work of *svarāṅkuśa śikṣā*, it is confusing whether he was Rāvaṇa or Jayanta.

- (XIV) *Śoḍaśaślokī śikṣā* is different from other *Yajurvedic śikṣās* as elementary division of alphabet their characteristics etc are clearly described in it. Enumeration of alphabets as described in *Śoḍaśaślokī śikṣā* is more detail than other *śikṣās*.
- (XV) Anantadeva in *Avasānanirṇayaśikṣā* describes 9 types of fullstops or “*avasāna*” in this *śikṣā*. Total 1975 “*avasānas*” are mentioned in this *avasānanirṇaya śikṣā*. In *kramapāṭha* it is prescribed here that *anusvāra* preceded by a short vowel should be treated as long provided it is not followed by the *visarga*.
- (XVI) *Kramakarikā śikṣā* depicts different types of *kramāvasānas* of *VSM*. It differs from *Vāśiṣṭhi śikṣā* as it does not deal with phonetics proper and it differentiates the *ṛk* and the *Yajuṣ* portions in each chapter of the white *Yajurveda*.
- (XVII) *Kātyāyanī śikṣā* describes the characteristics of the circumflex accent.

There is a metrical version of *Vāj.Prāt. Māṇḍavi śikṣā* enumerates how it prevents the confusion between “*b*” and “*v*” which is very predominant in the eastern zone. In comparison to *keśavī śikṣā*, *kātyāyanī* and *māṇḍavi* play a significant role in white *Yajurvedic śikṣās*. As *keśavī śikṣā* is known as *navāṅka sūtra* it mainly follows the *pratijñā'sūtra*.

The *Vāśiṣṭhi śikṣā* belonging to *Vājasaneyī saṁhitā* is completely different from the *Vāśiṣṭhi śikṣā* belonging to the *Taittirīya saṁhitā*. The former deals with the difference of *ṛk* and *Yajuṣ* portion. It has nothing left with phonetic proper where as later deals exclusively with phonetic matter.

There are certain general characteristics that are found in the *śikṣā* treatises. For example general classification and pronunciation of letters, mode of reciting and accentuating the Vedic text, method of learning the Veda, person worthy of studying the Veda, different manual gestures while uttering Vedic mantras etc have been enumerated in the *śikṣā* text along with some specific topics peculiar to the specific *śikṣās*.

IV.3.0 Specific peculiarities in *ŚYV śikṣās*

Among the existing available *śikṣā* texts, the maximum number of *śikṣās* is related to *ŚYV*. In all these *śikṣā* texts some specific unique principles relating to the pronunciation are to be found which are not found in other *śikṣā* texts relating to other Vedic recensions or whatever rules of phonetics are found they are completely different. This itself is a very interesting and significant point to note.

Some significant rules relating to utterance of alphabets as found in the *śikṣā* texts if *ŚYV* are as follows:-

- i) The varieties in the pronunciation of 'ṛ'
- ii) The pronunciation of *anusvāra* as short or long.
- iii) The Pronunciation of *visarga* as *ha*
- iv) The Pronunciation of 'y' as 'j' in certain specific cases
- v) The pronunciation of cerebral a murdhanya 'ṣa' as 'kha'

IV.3.(i) The varieties in the pronunciation of (ॠ) 'ṛ'

There is great difference among the *śikṣākāras* as to the pronunciation of the vowel ṛ as 'ri', 'ru' or 're'. This difference is due to the varieties of recensions and also due to the impact of geographical regions.

In the Mādhyandina recension of ŚYV the (ॠ) 'ṛ' is pronounced as 're'. The *śikṣā* texts have clearly mentioned that:-

halyutāyutasyoḥ saikārāśca // (Keśavī śikṣā sūtra-8)

Which means at the end of the *pada* or at the middle of the *pada* joined with the consonant or devoid of consonant (ॠ) 'ṛ' is to be uttered as 're'. In support of this principle the *Daivajña keśava* has quoted the second and third chapter of ŚYV as-

kṛṣṇo'si.....kreṣṇo'si / (II.1)

pitṛmate.....pitremate /

In the versified *śikṣā* of *keśava*, this principle is expressed in different words only as follows:

In the end of a word 'ṛ' should be pronounced as 're' in the *Mādhyandina saṁhitā* e.g. 'kṛṣṇo'si' should be pronounced as 'kreṣṇo'si'. 'pitṛmate' should be *pitremate*, *ṛttviya* should be 'rettviya'. When 's' is preceded by 'y' and 'v' it should not be doubled. (when 'ṛ' is joined or not joined with a consonant in the end of a word, it should be pronounced with 'e'. For 'ṛ' instead of 'ṛ' the same rule is applicable.

ṛkārasya ca saṁyuktāsaṁyuktasyāpi sarvataḥ /

saikāroccarāṇaṁ kuryālṛkārasya tathā bhavet // *kārikā-11*

This fact is also stated in the *Laghumādhyandinīya śikṣā* and three examples have been adduced in support of this as:-

hṛde>hrede, mṛgaḥ>mregaḥ, rcaṁvācam>recaṁvācam etc.

ṛkāraḥ khalu sarvatra hyekārasadṛśo bhavet /

hṛde mṛgastṛtīyā ca ṛcaṁ vācamathāparam // (kārikā-28)

Besides this in the *svarabhaktalakṣaṇa pariśiṣṭaśikṣā*, also this speciality of pronunciation has been noted with examples as follows:-

uṣmordhvarephasyoccāraḥ saikāro halyuto na cet /

pitṛṇāmiha pitreṇāmityādi ca nidarśanam // (kārikā-18)

If not combined with a consonant, the *repha* (r sound) riding an *ūṣman* (the three sibilants, *ha*, *upadhmānīya*, *jihvāmūlīya*, *anusvāra* and *visarga*) should be uttered with 'e' e.g. *pitṛṇāmiha* becomes *pitreṇāmiha*.

IV.3.(ii) The pronunciation of *anusvāra* as, short or long

The speciality of pronunciation of *anusvāra* is much more vividly treated in many *śikṣās* of *ŚYV*. The generally accepted view is that *anusvāra* is uttered as 'gum' and also a special sign[॥] is ascribed to it and the *śikṣās* of *ŚYV* vary as per the form of this sign.

Laghumādhyandinīya śikṣā very clearly and exhaustively throws light on this as :-

anusvāro yatra kutra śkāro bhavati dhruvam /

hrasva dīrgho gurśceti trividhaḥ parikīrtitaḥ //

hrasvāt paro bhaved dīrgho haṣsasiti darśanam /

dīrghāt paro bhavet hrasvo māṣṣebhya iti darśanam //
gurau pare hyanusvāro gurureva hi sa smṛtaḥ /
siṣhyasīti tatra tāvadṛkāre dīrgha'eva saḥ /
devānāṣṣhṛdaye tadvat taskarāṇām tathā sṛke // (kārikā-12-15)

The *anusvāra* after a short vowel becomes long e.g. 'haṣsa' (swan) and that after a long vowel becomes short e.g. *māṣṣebhyaḥ*. The *anusvāra* after a long vowel (either by nature or position) is considered as long when followed by *ṛ* e.g. 'devānāṣṣhṛdaye and taskarāṇām sṛke' (in the heart of the gods and in the arrow of the thieves). So also in *siṣhyasi* (you are a lioness) as the conjunct *hya* occurs after the *anusvāra*, it is to be uttered as *guru* or long. It may be pointed out that the sign for *hrasva anusvāra* is ṣ and *dīrgha anusvāra* is ṣ̄ as per the *laghumādhyandinīśikṣā*.

In this context in his *śikṣā* text *Daivajña keśava* has explained the word 'guru' and he suggests 'guru' as the conjoint alphabet. He has not given any exposition as to the position of *anusvāra* preceded by 'ṛ'. But rest of the different positions have been highlighted by him as follows:-

anusvārasya ūm śargala rephe ca pare /
hrasvād dīrgho dīrghādhraśva sayyoge guruśca // (kārikā-5)

anusvāra becomes long when followed by *śal* (*śa śa sa* and *ha*) and *repha*, the *r* sound. It is pronounced long (ṣ̄) after a short vowel and short after a long vowel. It is long in combination with a vowel. For example-

1. triṣṣat dhāmeti

2. sarvaṣṣaḍiti
3. bhūyāsaṣugrhapatiḥ - II.27
4. śataṣhi māḥ - II.27
5. samprajayā saṣrāyaspoṣeṇeti - III.19

After long vowel:-

6. prthivyāṣsatena pāṣaiḥ - I.25
7. sasṛvāṣsāvājajitam - XII
8. sambrhiraṅktāṣhaviṣā - XII
9. iṣāṣrayiṇām - III.13
10. surayā bheṣajaṣśriya - XXI.38
11. kalpatāṣśrotrāyyajñena - XVIII.29
12. daṣṣṭrābhyāmalimlūñjam - XI.78
13. puroḍāśair haviṣṣyā - XIX.20
14. somānaṣsvaraṇam - III.28
15. samṛṣiṇāṣstutena - III.19
16. siṣhyasi - V.10

The versified *śikṣā* of *keśava* also notes the same aspect as follows:-

anusvārsya ṣ. kāra ādeśaśchandasi smṛtaḥ // (kārikā-15)

uṣmarepheṣu paratastasya traividhyamucyate /

hrasvāddīrghad dīrghahrasvo gurau ca paratoḥ guruḥ // (kārikā-16)

īkārāpara ūsmāntye dīrghāddīrgho'pi jāyate /

parasavarṇe hyanusvārasyeṣat prakṛtirucyate //17

The *anusvāra* is said to be threefold when it is followed by the *ūṣma* (the sibilants etc.) and the *repha* ('r' sound). When either of the *ūṣma* or *repha* becomes long, then the *anusvāra* becomes short, and long when either of them becomes short and when that preceding letter becomes heavy. When the *anusvāra* occupying the ultimate position of an *ūṣma*, succeeds the *ṛkāra*, then the *anusvāra* becomes long accordingly as the preceding letter becomes. When the *anusvāra* is preceded by a homo-organic letter, the original form of *prakṛti* is known to a small extent.

aṇumātram anusvāro hyuttamam cāṇumātrakam / (kārikā-18)

anusvāra is of the size of an atom and this size is described as the best. The position of *anusvāra* and relative pronunciations are also hinted upon in the *svarabhaktalakṣaṇa pariśiṣṭaśikṣā* in the same way but in a different words only as follows:-

"śaśase ca kakhapaphe visargāḥ santi yatra ca" / (kārikā-18)

In the letters *śa*, *ṣa* and *sa* and in *ka-kha* and *pa-pha* the *visargas* are found. The *visarga* following *ka* and *kha* is called *jīhvāmūlīya* (produced from the root of the tongue) and the *visarga* following *pa* and *pha* is called *upadhmānīya* (produced by the act of blowing). The *svarabhaktalakṣaṇa pariśiṣṭaśikṣā* also states that:-

gūm(ᳵ)kārah syād anusvārasthāne śali ca re pare /

hrasvāddīrgho bhaveddīrghādhraśvo gururatho mataḥ // 19

śāyyoge parato ha(ᳵ)sa ityādi nidarśanam /

ta(ᳵ)saviturityādi da(ᳵ)ṣṭretyādikaṁ tathā // 20

hrasva-dīrgha-guruccārah kartavyo'tra yathākramam /

śalrephayorabhāvena si(ॐ)hī pratyudāhṛtiḥ // 21

When the *śal* (*śa śa sa* and *ha*) and the *repha* (*ra*) follow in the place of *anusvāra*, there should be (long) gūm. The *anusvāra* becomes short after a long vowel and long after a short vowel. It also becomes heavy after a light vowel etc. When the *anusvāra* is combined with the *śal* or *repha* in post-position, then it becomes long e.g. *ha(ॐ)saḥ*, (swan) *tā(ॐ)savituḥ* (the *anusvāra* becomes short as it follows a long vowel) and *da(ॐ)ṣṭrā* (the jaw). The *anusvāra* becomes long as it follows a short vowel. Herein the short, long and the heavy pronunciation should be observed in due succession. In spite of the absence of *śal* (*śa śa sa* and *ha*) and *repha* (*ra*) coming after words, the *anusvāra* becomes long according to the rule cited below by *Mallaśarma* e.g. *si(ॐ)hi* (lioness). Here *anusvāra* is noted as (ॐ). The *Mallaśarma śikṣā* also refers this *anusvāra* as (ॐ). Thus it says:-

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atha śkāra samjñā-hereafter the definition of gūm comes

hrasvāt agre bhavet dīrgho dīrghāt agre bhavet laguḥ /

devānām hṛdayam tyaktvā ś-syādeva dvilake pare // 26

dīrghhe tu deśinī tyājyā kṣipram syāt dvilake laghau /

mantre tridhā vidhir jñeyo brāhmaṇe tu dvidhā smṛtaḥ // 27

The long should become ahead of the short, and the light should become ahead after the long. Giving up (*devānām hṛdayam*), when the *dvilaka* (the *guru*, *laghu* and *hrasva anusvāra*) comes afterwards, the gum should be pronounced. But in the long, the index finger should be given up when the *dvilaka* is light. Then (*kṣipra*) (the thumb finger should be bent at its tip and pressed on the back of the index finger).

In the *mantra*, the rule should be known to be threefold and in the *Brāhmaṇa*, it is mentioned that the rule is twofold. (*kātyāyana's pratijñāsūtra*).

A completely different opinion is to be found in the *Yājñavalkya śikṣā* where *anusvāra* is pronounced as short when followed by a conjunct. Thus it is said:-

hrasvādagre bhaveddīrgho dīrghādagre bhavedlaghuḥ /
saṁyoge ca pare hrasvaḥ si(ᳵ)hyasi nidaśanam // 63

The *anusvāra* should become long if it is ahead of the short, and if it is ahead of the long, then it should become light. With regard to subsequent conjunction, i.e. if it is followed by a conjunct, then it becomes short eg. '*si(ᳵ)hyasi*'.

Along with this the *Yāj. śik.* has ascribed the one mora or two moras respectively in order to express the short *anusvāra* and long *anusvāra*.

anusvāro dvimātraḥ syāt ṛvarṇe vyañjanodaye /
hrasvo vā yadi vā dīrgho devānā(ᳵ)hṛdaye tathā // 65

When the letter 'ṛ' is joined with a consonant following the *anusvāra*, then the *anusvāra* has two moras, irrespective of being long or short eg. '*devānā(ᳵ) hṛdaye*'.

Such type of injunction has also been laid down by Amareśa in *varṇaratnapradīpikā śikṣā*.

IV.3.(iii) Pronunciation of *visarga* as 'ha'

Visarga is to be pronounced as *ha*. *Laghumādhyaṇḍiniya śikṣā*

has given stress upon this speciality of pronunciation of ŚYV.

hakāro naiva mantavya iti śāstravyavasthitiḥ /

phaṇiniśvāsasadṛṣo visarga bhavati dhruvam // 22

Which means though pronounced as ‘*ha*’ still *visarga* is not to be regarded as ‘*ha*’ itself. The *visarga* pronounced as *ha* should not be treated as *hakāra*. Such is the distinction made by the scripture. The *visarga* resembles certainly the sigh of the serpent. This pronunciation respectively becomes-

(i) *hakārah-----devovah-savitā*

(ii) *hikārah-----devī-stisro*

(iii) *hukārah-----ākhu-stepaśuḥ*

(iv) *hekārah-----agneḥ*

(v) *hokārah-----vāhoḥ*

Thus says the *Laghumādhyaandinīya śikṣā*:-

kaṇthyoṣṭhyastu tathaukārāḍvisargo bhavati dhruvam /

devo vaḥ savitā cātra hakārasadṛṣo bhavet // (kārikā-18)

The *visarga* after *aukāra* is certainly glottal and labial (produced simultaneously from the glottis and the lip). In ‘*devo vaḥ savitā*’ the *visarga* after *akāra* should be pronounced like *ha*.

devīstisro visargastu hikārasadṛṣo bhavet /

ākhuṣte paśurityādaḥ hukārasadṛṣo bhavet // (kārikā-19)

The *visarga* in the word ‘*devīḥ*’ should be pronounced as ‘*hi*’ and that in ‘*paśuḥ*’ etc. should be pronounced as ‘*hu*’. (*devīḥ tisraḥ* =

three goddesses, and *ākhuste paśuḥ* = the rat is your animal)

visargascāgnerityādaḥ hekārasadṛśo bhavet /

visargo bāhvyorityādaḥ hokāra sadṛśo bhavet // (kārikā-20)

The *visarga* in '*agneḥ*' etc. should be uttered like '*he*' and the same in '*bahvyoḥ*' etc should be uttered like '*ho*'.

atha svair dṛkṣairityādaḥ hikāra sadṛśo bhavet /

visargo dyauspitetyādaḥ hukārasadṛśo bhavet // (kārikā-21)

The *visarga* in '*svaiḥ dṛkṣaiḥ*' etc should be uttered as '*hi*' and the same in '*dyauḥ pita*' etc. should be uttered as '*hu*'.

From all the above examples this becomes clear that, the *śikṣākāra* has distinctily demarcated the specific pronunciation of *visarga* like a vowel but not as a consonant. The other *śikṣās* are not so explicit about *visarga*.

IV.3.(iv) '*ya*' (य) as pronounced as '*ja*' (ज) under some specific conditions

The utterance of '*ya*' (य) as '*ja*' (ज) is an unique speciality of *ŚYV* but in writing '*ya*' (य) remains as '*ya*' (य) only. The '*ya*' is pronounced as '*ja*' under some specific conditions. It may be said that when there is a slash mark at the middle of '*ya*' 'य' there it is to be uttered as '*ja*', *varṇaratnapradīpikā śikṣā* gives details of such speciality of pronunciation as follows:-

pādādaḥ ca padādaḥ ca sāyyogāvagraheṣu ca /

ja śabda iti vijñeyo yonyaḥ sa ya iti smṛtaḥ // 204

The '*ya*' sound should be known as '*ja*' at the beginning of a

pāda (the fourth part of a verse), at the beginning of a *pada* (word), in a conjunction (letter conjoined with a consonant) and in *avagraha* (separation of the component parts of the Vedic compound). The 'ya' other than such is to be pronounced as *ya*. For example:-

- 1) *yuktena manasāvayam* / 11/2;31 -at the beginning of a *pāda*
- 2) *tat tvā yāmi brāhmaṇm* / 18/49 -at the beginning of a *pāda*
- 3) *anukāśena bāhyaḥ-ya* conjoined with 'h' (in conjunction)
- 4) *yoge yoge*-In *avagraha* (occurring in the *pada* text of the Veda)
yuktena manasā tadvat tathā yāmi tathāparam /
anukāśena bāhyam ca yoge yoge nidarśanam //

The purport is that at the beginning of a *pāda*, and of a *pada*, at the conjunction of consonants or after the *avagraha* *ya* is pronounced as *ja*. In other cases *ya* is to be uttered as *ya*.

Yāj. śik. also states this without giving the example as follows:-

pādādau ca padādau ca samyogāvagāheṣu ca /
ja śabda iti vijñeyo yo'ntyaḥ sa ya iti smṛtaḥ // (verse-250)

At the beginning of a *pāda* and of a *pada*, in conjunction and in separation of a component parts of a Vedic compound, the 'ya' should be uttered as 'ja'. When 'ya' is the last letter of a word it should be uttered as *ya* and not 'ja'. The first three examples are the same except the fourth one which is '*manuṣyāḥ*' in which last letter '*yaḥ*' should be uttered as *yāḥ* (not *jāḥ*) (*turīyamanuṣyāḥ pade*)

In the "*Laghumādhyandinīya śikṣā*" and *Keśavas padyātmikā śikṣā*, the 'ya' is pronounced as 'ja' only in the beginning of a *pada*.

Thus it states:-

īṣe lakṣyaṁ kṛṣṇa' ukṣā samudraḥ pratyudāhṛtiḥ /
padādaḥ vidyamānasya hyaṁyuktasya yasya ca //

Laghumādhyandinīya śikṣā - 2

ādeśo hi jakāraḥ syāt yuktaḥ san haraṇena tu //

yajñena yajñam vailakṣyam mayūre pratyudāhṛtiḥ // Ibid-3

There is counter example in cases such as *īṣe*, *lakṣyam*, *kṛṣṇa* and *ukṣā* of the rule by which the cerebral 'ṣ' is pronounced as 'kha'. The 'ya' which not being joined with any consonant remains at the beginning of a word, becomes the substituted letter 'ja' and also when it is joined with 'ha' and 'ra' e.g. *yajñene yajñam*, (which is the reverse of the usual). It's counter example is found in *mayūra*

tasmād yajñāt sarvahutaḥ samasmād yat tathaiva ca /
rephēṇātha hakāreṇa yuktasya sarvathā bhavet // Ibid-4

In '*tasmādya*' and in '*samasādya*' the 'y' joined with 'd' (d+y) does not become 'j'. Hence it is a counter example. But the 'y' joined with 'r' and 'h' becomes 'j' in all circumstances e.g. '*ārya*' and '*bāhya*'

sūryo bāhyam tu vailakṣyam śaṣṣyāya pratyudāhṛtiḥ /
yakārarkārayuktasya jakāraḥ sarvathā bhavet // Ibid-5
saharayā tathā vṛyuddhya copasargaparasya na /
upayajñammānuṣāṇāmapi yantītyudāhṛtiḥ // Ibid-6

In the examples '*sūrya*' and '*bāhya*' the pronunciation of 'ya' as 'ja' is the reverse of the usual. In '*śaṣṣyāya*' there is the counter example because according to the rule cited in case of *śal*, the *ya* ought to be

pronounced as 'ja'. But it is hereby prohibited. When a letter is joined with *ya* or 'ṛ' (*yakāra* and *ṛkāra*) it becomes *ja* in any circumstance. The *ya* coming after a preposition should not be uttered as *ja* e.g. *upayajña*, and *apiyanti*.

Similarly in *Keśava's padyātmikā śikṣā* it is stated that

ādyāntasthasya joccārah padādaḥ paṭhitasya' ca /

upasargaparo yastu yasya chandasi neṣyate // kārikā-7

The *ya* read at the beginning of a *pada*, whether it stands either at the beginning or end is uttered as *ja*. But when it follows a preposition, the same rule is not allowed.

Besides the above position in certain other cases also 'y'(य) is pronounced as 'ja' (ज) references of which are to be found in

- i) *laghumādhyandinīya śikṣā*
- ii) *laghvamoghānandinī śikṣā*
- iii) *sūtrātmikā keśavī śikṣā*
- iv) *padyātmikā keśavī śikṣā*
- v) *svarabhaktīlakṣaṇa pariśiṣṭa śikṣā*

But in *Yājñavalkya* and in *Varṇaratna pradīpikā śikṣā* these points are not found. As per *Laghumādhyandinīya śikṣā* when 'ya'(य) is joined with *repha*, *hakāra* and *ṛ* then in *Mādhyandina Yajurveda* 'ya' is pronounced as 'ja'

As *sūrya*> is pronounced as *sūrja*

bāhya> is pronounced as *bāhja*

vyṛddhi> is pronounced as *vjṛddhi*

But in *saṣpyāya* as the above three positions are absent, so 'ya' is pronounced as 'ya'. In *Laghvamoghanandinī śikṣā* and *Laghumādhyaandinīya śikṣā* after *ṛ*, *ya* is not pronounced as 'ja'.¹ In *Keśavīśikṣā*, the position of 'ṛ' is instructed differently as at the beginning of a *pada* and at the end of a *pada* to determine the 'ja' sound of 'ya' *padāntamadhya -ṛ- ha-rephayugyasya yaśca keśavīśikṣā*² and *yq* joined with *ṛ*, *ha*, and *repha* occurring at the end or middle of a word. But in *svarabhaktalakṣaṇa pariśiṣṭa śikṣā*,³ the examples are given and in *padyātmikā keśavī śikṣā* as well as in *kātyāyanīya pratijñāsūtra*, both the rules of change of 'ya' in to 'ja' in utterance are expressed together. Thus the pronunciation of 'ya' as 'ja' is a significant speciality of *Mādhyaandina* recension and all most all the important *śikṣā* texts have thrown light on this aspect.

IV.3.(v) The pronunciation of the cerebral *ṣakāra* is uttered as guttural 'kha'

In the *Mādhyaandinīya* tradition the 'ṣa' is pronounced as 'kha' at the end of a word or at the middle of a word in certain specific cases. This aspect is so significant that the *Laghumādhyaandinīya śikṣā* starts his text with this as:-

atha śikṣām pravakṣyāmi mādhyaandinamatam yathā /
ṣakārasya khakārah syāt tukayoge tu no bhavet //
īṣe lakṣyam kṛṣṇa' ukṣā samudrah pratyudāhṛtiḥ / Karika-I-2

Which means now I shall explain the *śikṣā* according to the view of the *Mādhyaandina*. The 'ṣa' must be pronounced as 'kh'. But when

1. *Laghvamoghanandinī śikṣā kā - 3-4*

2. *Keśavakṛta padyātmikāśikṣā - 8*

3. *Svarabhaktalakṣaṇa pariśiṣṭa śikṣā - 16*

'*ṣa*' is in combination with '*tu*' (letters belonging to the *ṭa* class) and *ka*, that rule is not applicable. But there is counter example in cases of *īṣe lakṣya*, *kṛṣṇa* and *ukṣā*- which means that in the words cited above the *ṣa* should not be uttered as *kha*. Thus when conjoined with the *ṭavarga* and the consonant '*ka*' then '*ṣa*' is not uttered as '*kha*'. For clarification, the *ācārya* has given the examples as- *iṣe* 1/1, 23/35

In the versified *śikṣā*. Daivajña Keśava has used the expressions *mūrdhanya uṣmā* in place of *ṣa* and further states that this rule is to be observed only in vedic sanskrit but not in classical sanskrit. In the aphoristic *Keśavī śikṣā* and in *svarabhakti lakṣaṇapariśiṣṭa śikṣā*, it is enjoined that '*ṣ*' is to be uttered as '*kh*' except in '*ṭavarga*'.

ṭavargamantarā ṣasya khoccāraśchandasīritaḥ /

pratyudāharaṇam pṛṣṭo divīṣe tvā nidarśanam //

Svarabhakti lakṣaṇapariśiṣṭa śikṣā-17

Except in the letters belonging to the '*ṭa*' class (i.e. *ṭa*, *ṭha*, *ḍa*, *ḍha* and *ṇa*) the utterance of '*ṣa*' as '*kha*' has been prescribed in the veda. Its counter example is found in the words '*pṛṣṭa*' and *divīṣe* wherein the '*ṣa*' should not be pronounced as '*kha*'.

While explaining this, *Keśavī śikṣā* has given examples from *mantra* portion and *brāhmaṇa* portion. The example of *mantra* portion is- *iṣe tva* where '*ṣa*' is to be uttered as '*kha*'. The example of *brāhmaṇa* portion is- *iyam pṛthivī sarveṣāṃ bhūtānām* (this earth belongs to all beings) here also '*ṣa*' in *sarveṣāṃ* is to be uttered as '*kha*'. These are the peculiarities of pronunciation as related to '*ṣa*' as '*kha*'



CHAPTER-V
PRINCIPLES RELATING
TO
RAṄGA, NĀDA AND NĀSIKYA IN
ŚYV ŚIKṢĀS



CHAPTER-V

PRINCIPLES RELATING TO RAṄGA, NĀDA AND
NĀSIKYA IN ŚYV ŚIKŚĀV.1.(i) Definition and mode of pronunciation of *Raṅga*

The *raṅga* letter is not an extra letter in the series of letters or rather it is a special letter having the characteristic of *anunāsika* or it is a nasalized vowel. But in this context it is to be kept in mind that all the nasalized letters are not *raṅga* but only that nasalized vowel which occurs after the modification of *nakāra*, is the *raṅga*. For example:- *mahā[̃]indra*. In this example the letter *n* of the word *mahān* has been modified and elided by the rules "*ātaḥ aṭi nityaṁ*" and "*lopaḥ śākalasya*" etc. and the penultimate '*ā*' is nasalized. In this case *ā* is to be treated as *raṅga*, thus it is stated in "*Māṇḍūkyaśikṣā*":-

nakārānte pade pūrve svare ca parataḥ śthitel

raktavarṇaṁ vijānīyāt na graset pūrvamakṣaram// verse-145

raṅge caiva samutpanne no graset pūrvamakṣaram /

svaradīrghaṁ prayuñjīta paścānnāsikyamuccaret //

Yaj, Śik. 189; Pān.Śik.; 27; Lomaśī Śik, I, 8.

In pronouncing the *raṅga* sound one should not swallow up the preceding sound; the preceding vowel should be uttered long and then the nasal sound is to be uttered. Like *anusvāra*, it should not be pronounced quickly, making the preceding syllable heavy. Here the preceding syllable should be pronounced with delay.

raṅga is treated as '*ardhānusvāra*' because, as compared to the

long *anusvāra*, it is pronounced with less duration cp. *Taitt. Prāt.*-II, 17, 1.5.

“nasalisation should be stronger on words ending with *anusvāra* (Śaityāyana); it should be uniform everywhere (Kauhalīputra); it should be light on *anusvāra* (Bhāradvāja), when ‘n’ changes into ‘r’ a fricative, or y, (and when ‘m’ elides) nasalisation becomes gradually stronger”. *Sthavira Kauṇḍinya* cp. *Ṛk. Prāt.* 1.36, (*raktasamjñō'nunāsikaḥ*) xiii, 20, (*rakto vacano mukhanāsikābhyām*) xiv, 51 (*raktaṁ hṛasvaṁ drāghayanti 'ugra okaḥ*)’

anusvāra resulting from the elision of ‘m’ has stronger nasalization than *raṅga* (*Uvata*, *rangāpekṣayāmalopāt jātasya anusvārasya ādhikyam*) *anusvāra* has vocalic as well as consonantal qualities.¹ As a vowel, it is short, long or prolated, acute, grave or circumflex. As a consonant, it is pronounced with half a mora, it is joined with other consonants and it shares the accent of the vowel on which it depends. The *Ṛk. Prāt.* uses the word ‘*rakta*’ to denote a nasal sound produced from the nose and the mouth which is slightly lengthened in pronunciation, but *raṅga* is different from this sound. *raṅga* is often treated as *anusvāra* because, it is also a post-vocal nasal sound like the latter.

V.1.(ii) Illustration of *raṅga* from secular speech

yathā saurāṣṭrikā nārī takrā 2^{1/2} ityabhibhāṣate /

evaṁ rangāḥ prayoktavyo ṅkārāparivarjitaḥ //

Yaj. Śik. 190, *Pān. Śik.* 26, *Nār. Śik.* ii.4.9; *Māṇḍ. Śik.* (AV) 113
Sarvasammata Śik. 48, *Pari, Śik.* (commentary) 55.

1. *anusvāro vyañjanam vā svarō vā Ṛk. Prāt.* 105

Just as the milkmaid in Saurashtra, when selling curd exclaims “*takrā* 2 ½” so should *raṅga* be pronounced without any addition of the consonantal element ‘n’

V.1.(iii) Determination of the vowel-length of *raṅga*

dvimātro mātriko vā'pi nāsāmūlaṁ samāśritaḥ /

ante prayujyate raṅgaḥ pañcamaiḥ sānunāsikaḥ // Yaj Śik. 191

raṅga consists of either two moras or one, and is articulated in the root of the nose. When *raṅga* is pronounced with two moras, one mora is pronounced in the heart, half a mora in the nose. When it is pronounced with one mora, half of it is pronounced in the heart, one-fourth in the roof of the palate and the rest one-fourth in the nose. *Raṅga* is pronounced with two moras, when it occurs either between two vowels, or between a vowel and a following ‘r’ resulting from the elision of ‘n’.

e.g. ‘*lokā* 2 ½ ‘*akalpayan*’ (ŚYV xxxi.13)

‘*satrū* 2 ½ ‘*rapa*’ (ŚYV vii.37)

raṅga is pronounced with one mora, when it occurs between a vowel and a consonant or between a vowel and a following fricative.

e.g. ‘*yamairayā* 1 ½ ‘*ścandramasi*’ (ŚYV i.28)

The *Lomaśi Śik.*² recognizes two primary divisions of ‘*raṅga*’ (1) *svarapara* (followed by a vowel) and (2) *vyañjanapara* (followed by a consonant) both resembling the colour of the pigeon (*pārāvatasavarṇābho*). There are five *amuraṅgas* each consisting of one *mātrā* and a half. They have Pūṣā, Mitra, Vasu and Añjanā as their presiding deities.

2. *raṅgastu dvividho jñeyah svaraparo vyañjanaparah /*
pārāvata savarṇābho vihito'kṣaracintakaiḥ // (lomaśi śikṣā-verse-6)

anuraṅga has also been identified with *anunāsika* (*Amogh. Śik.* 42)³.

V.1.(iv) Distinction between *anusvāra* and *raṅga*

Illustrations: *Kratū* १^{१/२} ranu (*ŚYV* xix.40)

Satrū १^{१/२} rapa (*ŚYV* vii.37)

Paridhī १^{१/२} rapa (*ŚYV* xix.53) etc.

raṅga is distinct from *anunāsika* by its place of articulation. While *anunāsika* is articulated both in the mouth and in the nose, *raṅga* is articulated only in the nose, hence it is designated as '*sarvanāsika*'. *raṅga* may be regarded as a species of which *anusvāra* is the genus. That *raṅga* possesses the qualities of *anusvāra* is evident from Pāṇini's enumeration of letters. According to *Pān. Śik.*, the number of alphabetic sounds is either sixty-three or sixty-four. It is explained by some that the number sixty-four has been accounted by the addition of '*raṅga*' to the alphabetic sounds. This fact is further strengthened by the authoritative words of the commentator of the *Śikṣā Pañjikā* on *Pān. Śik.* which cites the two *anusvāras* on the authority of Audāvraji. Excluding '*raṅga*' the number of alphabetic sounds comes to sixty-three. Further in verse 26. (*Pān. Śik.*), Pāṇini describes a second *anusvāra* which probably denotes the *raṅga* sound. Hence *raṅga* may be taken as a species of *anusvāra*.

nās ādutpadyate raṅgaḥ kāṁsyena samaniḥsvanaḥ/

mṛduścaiva dvimātraḥ syāddṛṣṭim ā 2^{१/२} īdeti nidarśanam //

Yāj. Śik. 194

The '*raṅga*' vowel is produced from the nose. It has a sound like

-
3. *pūṣā-mitra-vasuścaiva aṅjanāḥ parikṛtitāḥ/*
ekārdhamātrikām sthithvā pañcaite cānunāsikāḥ//

that of the bell metal (bronze), it has softness and is of two moras long. The following description of *raṅga* makes it distinct from *anusvāra*:

- 1) *raṅga* is produced from the nose (according to another reading, from the heart) while *anusvāra* is produced from the root of the teeth (*dantamūlīyaḥ. Pān. Śik.23*),
- 2) *raṅga* is a distinctive designation for the pure nasalized vowel while *anusvāra*, being more general and indefinite is sometimes restricted to *raṅga* and sometimes covers both the aspects of a nasal sound.
- 3) *raṅga* is *mṛdu*. (soft, devoid of voice), whereas *anusvāra* is pronounced with voice.
- 4) *raṅga* has two moras and *anusvāra* being a consonant, has half a mora. *Pāri. Śik.* (commentary) describes '*raṅga*' as sweet like the notes of bell and deep like a tiger's roar. The *Śikṣā Pāṭha* states:-

"just as a pearl, overpowered with the light of sapphire, becomes blue, so the entire vowel, when nasalized, becomes a *raṅga*"⁴
- 5) *raṅga* sounds like the bell-metal and *anusvāra* sounds like a lute of the bottle-gourd (*Pān. Śik.23*)

The traditional orthographers put the number "2^{1/2}" together with the sign of hiatus after the nasalized penultimate letter. This is to indicate the vowel length and duration of *raṅga* consisting of two moras. The number '1^{1/2}' without the sign of hiatus after the nasalization of the

4. Siddheswar Verma, *Critical Studies in the Phonetic Observations of Indian Grammarians*, p.150

penultimate letter, indicates the vowel-length of *raṅga* consisting of one mora only. To put the sign of hiatus after the numeral '2^{1/2}' or '1^{1/2}' however, is optional and it has no important significance. It is interesting to note that *raṅga* is sometimes designated as *ardhānusvāra*.

V.1.(v) Comparative duration of *raṅga*

Malla Sarmā gives a comparative account of the duration of *raṅga* in different positions as follows:

susandheścāvasānasya sārddhadvynkena bindunā /

bhaṅgaṁ syādatra mantreṇa vai raṅgastu bhavediti //43

mahāśabdo'tiśabdaśca yadvarṇātprāk pravartate /

mahāraṅgo'tiraṅgaśca sanjñā tasyaiva niścītā //44

atha raṅgādīnāmuccāraṇe pramāṇam- The proves in the utterance of *raṅga*

hrasvāttu dviguṇo dīrgho dīrghādekaguṇaḥ plutaḥ /

plutādekaguṇo raṅgo raṅgādekaguṇādhikaḥ //45

mahāśabdena saṁyukto vyañjanam cārddhamātrikam /

atiraṅgo mahāraṅgād vṛddho hyekaguṇādhikaḥ //

Mallasarma Śik. 43-46 verses

Thus the long vowel is double the short one, the *pluta* is one mora longer than the long vowel; *raṅga* is one mora longer than the *pluta*, '*mahāraṅga*' (*raṅga* preceded by the word '*mahā*') is one mora longer than *ranga* and '*atiraṅga*' (*raṅga* preceded by the word '*ati*') is one mora longer than *mahāraṅga*. *Mallasarma. Śik. 43-46*

Illustrations:

- 1) *māhā* 2^{1/2} *asi* (ŚYV xxxiii, 39-40)
- 2) *amṛtā* 2^{1/2} *anu* (ŚYV iv.28)
- 3) *asmā* 2^{1/2} *aśnotu* (ŚYV iii.36)

The vowel-quantity of *raṅga*, being greater than that of the *pluta*, belongs to *raṅga* as well as the penultimate letter. Similarly, the vowel quantity of *māhāraṅga* and *atiraṅga* is at once concerned with *raṅga*, it's penultimate letter and the hiatus between *raṅga* and following vowel. The *Amogh Śik.* (45-46) does not admit the distinction between '*māhāraṅga*' and '*atiraṅga*'. According to it, this distinction is tentatively made with a view to determining the vowel-quantity of *raṅga* in different positions. That is why the vedists, in actual pronunciation, do not observe this distinction and adopt a uniform mode of recitation for all these varieties.

The vowel on the penultimate letter should be slightly nasalized (literally coloured) like the colour of jewels or of China rose. Nasality should be confined only to the vowel and should not affect the penultimate letter. There should be no continuous nasalization while pronouncing *raṅga*.

e.g. *māśpacanyā* (ŚYV xxv.36) where '*māś*' should be pronounced as '*māns*'.

The designation '*raṅga*' is sometimes applied to the entire word in which it occurs, and it may be justified since any characteristic feature pertaining to the syllable or the letter, may be, in a broad sense, also belongs to the corresponding word. For instance, when a syllable is

unduly nasalized, they speak the same about the word in which the syllable occurs. This has been illustrated by the following simile.

“Just as water coloured with lac is called red water in which lac is completely dissolved, likewise the nasal colour, though confined to the vowel on the penultimate letter is apt to nasalize the whole *pada* in which it occurs”. Then the whole *pada* receives the designation of *raṅga*.

e.g. *śatrū* 2^{1/2} *rapa* (ŚYV vii-27) cp. *Vaj. Prat.* ii. 142.

Where the final ‘n’ has changed into ‘r’ the vowel ‘u’ being the penultimate is nasalized alone. But the word ‘*śatrū*’ is also designated as *raṅga*. In the absence of euphonic combination between a final ‘n’ and a following consonant, the two should remain separated as they are. But in euphonic combination ‘n’ changes and becomes homorganic with the following consonant, then it is nasalized by one-fourth of a mora (*Nār. Śik.* ii.4.6).

e.g. *ahinca-ahī śca* where ‘n’ has changed into ‘ś’
(*Vāj. Prāt.* iii.135)

and the penultimate vowel is nasalized (*Vāj. Pārt.* iv.4). The *sthāna* (place of articulation) of *raṅga* is *nāsāmūla* (root of the nose) and the *karaṇa* (articulator) is *hanūmūla* (root of the jaws).

V.1.(vi) Varieties of *raṅga*

pañca raṅgāḥ pravartante ghātānirghātavajriṇaḥ /

ahīṇaḥ prahīṇo jñeyo yathā a ī ū ṛ o nidarśanam // Amogh Śik. 43.

raṅga is of five different kinds:

1) *ghāta*, 2) *nirghāta*, 3) *vajriṇaḥ*, 4) *ahīṇa* and 5) *prahīṇa* when

followed respectively by *a*, *i*, *u*, *r*, and *o*. For ‘*ahīna*’ and ‘*prahīṇa*’ some MSS use ‘*ahāra*’ and ‘*prahāra*’)

- Illustrations:**
- 1) *ghāta*, *devā* 2^{1/2} *āsādaya* (ŚYV. xxii.17)
 - 2) *nirghāta*, *devā* 2^{1/2} *īdeṣi* (ŚYV. xxiii.16)
 - 3) *vajriṇa*, *devā* 2^{1/2} *ūtibhiḥ* (ŚYV. xviii.33)
 - 4) *ahīna*, *devā* 2^{1/2} *ṛtubhiḥ* (ŚYV. xvii.33)
 - 5) *prahīṇa*, *amitrā* 2^{1/2} *oṣatāt* (ŚYV. xiii.12)

V.1.(viii) Oral gesture in the pronunciation of *raṅga*

*vyāghrīyathā haret putrān daṁṣṭrābhyāṁ na ca pīdayet/
bhūtā patanabhedābhyāṁ tadvat varṇān prayojayet//*

*Yaj. Śik. 195, Māṇḍ. Śik. 43,
Pān. Śik. 25, Śoḍasa, Śik. 15.*

As the tigress carries her cubs between two rows of teeth taking care lest they should either be dropped or bitten so should one pronounce the *raṅga* sound lest it should be dropped or differentiated (i.e. mispronounced). Suppression of the *raṅga* sound resembles ‘*n*’ and elision of the same, resembles ‘*m*’ *atra śaithilyena nakāraśrutiḥ pīḍanenaśca makāraśrutiḥ syāt*. Therefore in pronouncing *raṅga*, one should be aware of ‘*n*’ and ‘*m*’ sounds. Further in pronouncing ‘*raṅga*’ the mouth cavity should neither be too closed nor too open (*nātivivṛtām nātisamvṛtam āsyām kṛtvā rangoccāraṇam vidheyam*).

V.2.0 *Nāda* and *Nāsikya*

V.2.(i) Definition

‘*nāda*’ is a nasal sound represented by a semicircle and

pronounced with a deep sound; ‘*nāsikya*’ is an ordinary nasal sound. *nāda* occurs with *visarga* and *nāsikya* occurs with *anusvāra*. *nāda* consists of two *mātrās* and ‘*nāsikya*’ of one *mātrā*.⁵ The same sound becomes ‘*nāda*’ or ‘*nāsikya*’ according to the position it occupies in speech. Below are given certain sounds which change from ‘*nāda*’ to ‘*nāsikya*’ or vice-versa under different circumstances.

- ➔ The nasal consonants, followed by voiced stops are ‘*nāda*’ e.g. ‘*anudaha*’.
- ➔ The nasal consonants (i.e. *ṇ ñ ṇ n* and *m*) followed by conjunct semivowels, ‘h’, the third and the fourth letter of each mute-series, these eight are ‘*nāda*’ (voiced) when they end with the *visarjanīya*.
- ➔ ‘n’ and ‘m’- being heavy, are ‘*nāda*’, but being light are ‘*nāsikya*’.
- ➔ The conjunct ‘n’ and ‘m’ and ‘n’ and ‘m’ ending with *visarga*, are also ‘*nāda*’.
- ➔ Nasal consonants followed by nasal consonants are ‘*nāsikya*’ pronounced with one *mātrā* (e.g. ‘*namasteti*’).
- ➔ A pause, a hiatus and a voiceless letter--these followed by a conjunct consonant, are ‘*nāsikya*’.
- ➔ A voiceless plosive, a nasal consonant, and a vowel,- (these three at the end of a sentence), a conjunct letter at the end of a word and a short vowel at the end of a word--these five are ‘*nāsikya*’.
- ➔ One should employ ‘*nāsikya*’ in hiatus, pause, hemistich, stanza, word and foot (*pāda*).

5. *Pārā. Śik.* verses 39-56; *Amogha. Śik.* verses 30-40; *Lomasi. Śik.* V

- ➔ 'h' joined with 'r' is '*nāda*' under all circumstances except when it is pressed by the following word.
- ➔ When 'h' stands between two 'm's, both are '*nāda*', *idamahama* (VSM 1.5),
- ➔ 'n' and 'm' (whether short or long) changing into *anusvāra*, are '*nāsikya*', but changing into semivowels, are *nāda*.
- ➔ 'h' preceded by 'n' or 'm', is '*nāda*'.
- ➔ 'n' or 'm' followed by a voiceless plosive, is '*nāda*'.
- ➔ 'n' being intervocalic; *apṛkta*; joined with r and followed by the *visarjanīya* preceding a voiceless plosive, is '*nāsikya*' e.g. *nṛṇḥ pāhi* (VSM. Xiii.52).
- ➔ The 'm' preceded by a word ending with 'o' is '*nāda*' e.g. *kraviso makṣikā* (VSM.Xxv.32)
- ➔ 'y' in hiatus, in pause, in hemistich, in *kṣipra* vowel, in long vowel, in conjunct consonant, and at the end of a *pāda* is '*nāsikya*' and 'r' preceded by a word ending with 'k' is '*nāsikya*' e.g. *dadhyañṇṛṣiḥ* (VSM.xi-33)

V.2.(ii) Pronunciation of *nāsikya*

It is pronounced with local friction at the velic, in other words, it is a fricative nasal or a nasal fricative. In its mode of articulation, the two processes of breath and nasality overlap either partially or wholly. This is suggested by the so-called metathesis in Prakrit languages of the type *brāhmaṇa-bāmhaṇa* etc.

V.3.0 Yama letters (Faucal Plosive)

V.3.(i) Definition of Yama

Yama literally means “twins” and in the phonetic treatises they are in the form of two stages in the articulation of the plosive. For example

- 1) *rukma*
- 2) *paddma*
- 3) *swappna*

The first stage is the implosive stage of the plosive. In the second stage air passes through the nasal cavity when the contact for the articulation of the following nasal consonant is being made. The passage of air through the nasal cavity nasalizes the plosive. Thus the *yamas* are said to be particular nasal sounds occurring in the following group.

Plosive+nasal consonants. *Yamas* are the nasal sounds intervening between the plosive and the nasal consonant. In this context one question arises as to whether the *yama* letters belong to the preceding or the succeeding syllable. According *Vāj.prāt.* (I.103) the *yama* letters belong to the preceding syllable whereas according to *Taitt.Prāt.* (xxi.8) they belong to the succeeding syllable.

As per the opinion of *Taitt.Prāt.* the syllabic division of *yama* letters will be as follows

- 1) *paddma-pad+dma*
- 2) *rukma-ruk+kma*
- 3) *svappna-svap+pna*

But as per *Vāj.Prāt.* the syllabic division will be as follows :-

- 1) *paddma-padd+ma*
- 2) *rukkma-rukk+ma*
- 3) *svappna-svapp+na*

V.3.(ii) Mode of Pronunciation

The discussion about yama letters is a significant point in the *śikṣā* text as follows:

i) *Pān. Śik. 4 Yāj. Śik. 212*

ii) *Nār. Śik. ii. 1.8.9 Gautami Śik. 1*

śunyālaye pi śāco'pi garjate na ca dṛśyate /

evaṁ varṇāḥ prayuktavyā upajjman iti darśanam //Pārā Śik. 59

Just as an imp growls in an empty house without being visible, likewise the *yama* should be sounded although not visible in orthography.

e.g. *upajjman* (*VSM* xvii.6)

V.3.(iii) Number of yamas

“*catvāro yamāḥ kṛ, khṛ, gṛ, ghṛ, iti*”

(*Gautami Śik. 2; Pān. Śik. 4; Yaj. Śik. 212*)

The enumeration of *Yamas* as four, appears to be puzzling; for, according to the definition given by the *Nār. Śik. (ii.1.8)*, the number becomes twenty. *Uvaṭa* in his commentary on *Rk. Prāt. (vi.29)* tries to justify both the enumerations as follows:-

The number of original *yamas* is four and that of substituted *yamas*, according to the total number of non-nasal stops, is twenty. The number ‘four’ however, is justified on the ground that the first mute series (i.e. *k*,

c, ṭ, t, p,) has 'k' as its *yama*, the second mute series (i.e. *kh, ch, th, th, ph*) has 'kh' as its *yama*, and so on,. In pronunciation, the *yamas* do not share the characteristics of their respective mute-series to any considerable extent. Hence, they are called the first, the second, the third and the fourth *yamas*.

The author of the '*Kīrtiprakāśa*', a commentary on the *Vāj. Prā.* prescribes the pronunciation of j + j + n as j + g + m, 'g' being the *yama*. He justifies the pronunciation of *yama* 'g' saying, that in the junction J + *yama*) g + n, 'g' appears as a result of the violation of *sthāna* and *karaṇa*, almost in the same way as brass is produced by the amalgamation of zinc and copper.⁶ But the commentator of *Yaj. Śik.* criticizes this view. According to him, the conjunct j+n should not be pronounced as 'gya' or 'jga' or 'jya' which are definitely erroneous forms of 'jna'

It is interesting to note that *yama* is sometimes orthographical, without having any phonetic significance, e.g. *patnya* (*Vāj. Prā.* XXX.22) which is written as '*patknya*', 'k' being the substituted *yama*, which the *Vedic ācāryas* do not pronounce. But they write it merely to indicate the *yama*.

It may be questioned that in '*patnya*', 't' being the proper *yama* (*Vaj. Pra.* Iv. 161) why do they write 'k'? The commentator replies: "Velum" is the articulator of '*yamas*' and the articulatory effort for the present *yama* sound with 'velum' as its articulator, produces a

6. *atra jakāra-yamagakāra varṇāntarotpattiḥ / yathā tāmratrapu saṁyoge kārṇasya yotpattiḥ // Vāj. Prā.*, p. 303

*nāsāmūlena karaṇena yamoccāraṇe pravṛtto yatnaḥ
jihvāmūlīyasadṛśo, śrutimutpādayet, iti tathaiva sambhavābhiprāyeṇa
likhanāt. “On Yaj. Śik. fn.3) On the number ‘twenty’, it is observed
that:-*

Yamas are four in number and not twenty. The number ‘20’ may be justified as ‘*prakṛtiviśeṣaṇa*’ (subjective adjective) and not as ‘*vidheyaviśeṣaṇa*’ (predicative adjective). So one can say ‘twenty *yamas*’ but not “*yamas* are twenty” and “twenty *yamas*” always mean that they are not originally twenty in number but they become twenty after the number of the twenty non-nasal stops. The *Gautmai Śik.* observes:⁸

“There are twenty non-nasal (literally non-final) stops such as k, c, ʈ, t, p etc. Among these, only four are ‘sayamāḥ’ viz, *kum, khum, gum, and ghum*”

Swami Dayānanda, in his introduction to the *Varnoccārana Śikṣā*

7. *vaidikāḥ.....yamatvadyotanāya kakāraṁ vilikhanti na punaḥ kakāraṁ uccārayanti on Yāj. Śik.*
8. *athānantyā vimśatir bhavanti te kacatatapāḥ khacchṭhathaphāl gajaḍadabā ghajhaḍhadhabhā ścetyathāntyāḥ pañca te nāñāṇanamā ścetyathā nantyā ścatvāraste sayamāste kum̐ khum̐ gum̐ ghum̐ ityanantyāntyasamnyogena antyapūrve'ntyottare vyavadhāna varjite tatra yamā vartante na samśaya iti ||2||*

criticizes the traditional view regarding 'kum, khum, gum, ghum' as four *yamas*. According to Dayananda 'kum, khum, gum, ghum' should not be regarded as *yamas*, for, if these are taken as *yamas*, why not cum chum jum jhum etc.?

V.3. (iv) *Yama* regarded as *ayogavāha* sound

The *Pān. Śik.* (22) regards *yamas* as 'ayogavāha' sounds. The term 'ayogavāha' has been interpreted differently by different scholars.

1. Patañjali:

They are called 'ayogavāha' because they are heard though not mentioned in the Pāṇinian enumeration of the alphabet (*Mahābhāṣya*. I.1.2.)

2. The author of the Pañjikā:

They are called 'ayogavāha' because they are not joined with other letters (on *Pān. Śik.*)

3. *Uvaṭa*: (*Vāj. Prā. Viii. 18*)

They are called 'ayogavāha' because they attain their realization only when joined with the letters of the alphabet. The negative augment 'n' is taken by *Uvata* in the sense of the vowel 'a'.

4. The author of *Va. Ra. Pra. Śik.* (50-51)

reads it as 'samyogavāha'

anusvāro visargaśca nāsikyo'tha yamāstathā /

jihvāmūlamupadhmā ca navaite syuḥ parāśrayāḥ //

saṁnyogavāhā evaite nijasvara vivarjitāḥ /

pūrvasyāṅgaṁ bhavantyeṭe svara eteṣu pūrvavat //

5. The author of the *Laghu, Mādh. Śik.* regards only the *Visarjanīya* as *ayogavāha*.

The *Nār. Śik.* regards the *yama* as the *savarṇa* of two *pūrva varṇas* or two previous letters.⁹

V.3.(v) The bodiless *yama*

jakārau dvau makaraśca rephastadupari sthitaḥ /
aśarīraṁ yamaṁ vidyatsammārjjmīti nidaśanam //

Pārā. Śik.-Verse 58,

In the junction 'r + j + yama + m', 'yama' is called bodiless, because it is not distinctly audible due to the contraction of nostrils

V.3.(vi) Syllabication of *Yama*

Max Muller takes the *yama* to be a nasal sound proceeding the mute. The *Nār. Śik.* takes the *yama* to be homorganic with the preceding letter.¹⁰ The *Taitt. Prā.* (XXI.8) speaks of the *yama* as occurring after h and as belonging to the preceding syllable. The possibility of both of these syllabic divisions is attested by Siddhesvara Verma as he comments "Both views were phonetically possible for, by the force of regressive assimilation, which was so prominent in Sanskrit, the opening of the nasal cavity for the articulation of the succeeding nasal consonant may

9. *anantyaśca bavet pūrvo antyaśca parato yadi /*

tatra madhye yamas tiṣṭhet savarṇaḥ pūrvavarṇayoḥ // Nār. Śik. II. 1.8

The examples are- *aggñe, tigḡmena, yajjñānām, majjmanā, pratñassya,*
stanayitñnoḥ, nṛṣaddmā, yuddhīma, appñavānavad

10. *amusvāro visargaśca nāsikyo'tha yamāstathā /*

jihvāmūlamupadhmāca ca navaite syuḥ parāśarayāḥ //

sāyyogavāhā evaite nijasvaravivarjitāḥ /

pūrvasyāṅgaṁ bhavantyete svara eteṣu pūrvavat // verse 50-51

have taken place not only while the preceding plosive was being exploded but in some dialects, even before its articulation had started.”¹¹

V.3.(vii) Prohibition of *Yama*

Yama is prohibited if the nasal mute is combined with either a preceding sibilant or a semivowel. Regarding the group fricative + nāsāl consonant there is some divergence of opinion. The *Yaj. Śik.* prohibits the nasalisation of hissing fricatives and enjoins that when a nasal consonant follows fricatives or semi vowels, the *yama* letters leave them just as the relations of a dead man retire after leaving his corpse in the burial ground or just as an elephant retreats at the sight of a lion:

pañācamāḥ śaśasairyuktā antasthairvā'pi samyutāḥ

yamāstatra nivartante śmaśānādiva bā andhavāḥ // verse 214

In another reading the last *pada* is found as follows:-

siṁham dṛṣṭvā yathā gajāḥ

Yama is prohibited when the nasal mutes after the fricatives or the semivowels are doubled in the letter-junction.

e.g. (i) vilmmine (*VSM*.xvi.35) (ii) *VSM*. Asmmin (iii) etc.



V.3.(viii) *Yama* and *Nāsikya*

Nāsikya is the junction between h and a nasal consonant (h+nasal). Ananta Bhatta (on *Vāj. Prāt.* viii.23) regards '*nāsikya*' as *anunāsika*. The Tribhāṣyaratna (on *Taitt. Prāt.* Xxi.14) regards it as a nasalization of *h*.



11. *Critical Studies in the Phonetic Observations of the Indian Grammarians*, p. 79

Whitney (on *Ath. Prāt.* I. 99-100) regards *nāsikya* as another *yama*. The *Sarvasammata Śik.* (42) takes it to be a nasalization of 'h'. The *Cārāyaṇīya Śik.* prohibits the nasalization of h; i.e. it does not admit 'nāsikya' as a separate sound. *nāsikya* has the same organ as it's *sthāna* and *karaṇa*.

Yama and *nāsikya* have 'nose' as their '*sthāna*', but their *karaṇa* is different. The *karaṇa* of *yama* is the *nāsāmūla* (velum) whereas the *karaṇa* of *nāsikya* is the nose.



CONCLUSION & BIBLIOGRAPHY



Conclusion

I. The Vedas as the early source of phonetics

As observed by S. Varma, “The study of phonetics was pursued in ancient India with an interest which has few parallels in antiquity”.¹ The observations of the *RV* (X.71) is also an interesting contribution to the early history of linguistics. The well-known *mantra* of *RV* (IV.58.3) is an interesting observation of the seers on speech which according to Patañjali’s interpretation is compared to a bull, the sounds of which are attributed to three organs- viz.; the lungs, the throat and the head.² In *Aitareya Brāhmaṇa*, speech is compared to the ocean on account of its inexhaustible nature:-

vāg vai samudro na vāk kṣīyate / Aitareya Brāhmaṇa XIII.21

It also enjoins that the *stotriya* verses should be recited in intermediate speech, which refines the soul:-

taṁ madhyamayā vācā śaṁsatyātmānam eva tat saṁskarate /

Aitareya Brāhmaṇa XII.13

The study of phonetics in India had reached a considerably advanced stage even during 800-1000 B.C. The *Āśvalāyana śrauta sūtra* provides the data about the pronunciation prescribed during the recitation of certain verses on the fourth day of the *navarātra* ceremony. It prescribes that a single vowel was to be repeated sixteen times in varied quantity and accent. As aptly remarked by S. Varma:- “Thus the final ‘o’ of *āpo* in

1. S. Varma, *Critical Studies in the Phonetic Observation of Indian Grammarians*, p. 1

2. Patañjali *Mahābhāṣya paspaśāhnika- tridhā baddhaḥ triṣu sthāneṣu baddha uraṣi kaṇthe śirasī //*

āpo revatīḥ kṣayathā was (1) first pronounced with a quantity of three moras and the high tone: ॐ३; (2) then five times as a short unaccented vowel- half O or ॐ; (3) again like (1); i.e. ॐ३; (4) again five times like (2) i.e. ॐ; (5) like (1), i.e. ॐ३; (6) three times like (2), i.e. O. So the final 'o' of *āpo* in this particular recitation was pronounced as follows: ॐ३ ॐॐॐॐॐ ॐ३ ॐॐॐॐॐ ॐ३ ॐॐॐ.”³

This minuteness of the details suggests that the phonetics had developed a lot in the Vedic period. Various sounds have been described in terms of different objects in nature.

II. Śikṣā as the main source of phonetics

The general phonetics is to be met within the scope of *śikṣā* literature, *śikṣā* implied 'general phonetics' while *prātiśākhya*s implied "applied phonetics". Further *śikṣā* lay down general principles of phonetics which were further applied by the *prātiśākhya*s to the various Vedic texts with which they are related. The *śikṣā*s claim a number of distinct contributions to phonetics; specially the *Yajurvedic śikṣā*s along with some specific rules relating to *YV* prescribe certain general conditions for correct pronunciation as sound health, calm temperament, freedom from nervousness, abstention from omission of sounds, overstress, faltering tone, consistently distinct pronunciation of the beginning and end of the speech, abstention from habits of roughness, projecting the lips, indistinct pronunciation, nasal twang, broken speech, and rigidity of the tongue, good teeth and lips. Other essentials are a clear throat, the cleaning of teeth and the throat with a twig-brush etc.

Minute details regarding the relation of the vowel and the

3. S.Varma, *Ibid*, p. 2

consonant, the nature of accent, the relation of accent and quantity etc. are also dealt upon by the śikṣā texts. The *Yāj. śik* tells that the vedic accent was musical. The seven musical notes mentioned in the science of music are exactly the three accents, *udātta* etc. in the vedas.

gāndharvavedā ye proktāḥ sapta ṣaḍjādayaḥ svarāḥ /

ta eva vede vijñeyāstraya uccādayaḥ svarāḥ // ŚS., p.1

The śikṣā texts also give details of *svarabhakti*, the nature and quantity of *anusvāra*, *raṅga*, the *abhinidhāna*, and the doublings. The authors of śikṣā texts were authorities on phonetics. Their minute observations on syllabication, accentuation etc. are distinct contributions to general phonetics.

Thus for the development of modern phonetics in the computer system, the knowledge about śikṣā texts is very essential. So the vedic student must go through the śikṣā literature for the correct pronunciation as well as correct appreciation of vedic texts.

III. Contribution of śikṣā literature for correct vedic recitation

The seers of ancient India had maintained the *svādhyāya* tradition with utmost accuracy and intelligence as a result of which we are able to get the vedic texts intact. But now-a-days, vedas which are the store house of Indian wisdom and culture are only retained in certain texts in the libraries only. The vedic students know the theories of the vedic accents but not their effective application. Under such circumstances, steps must be taken to preserve, protect and sustain the ancient heritage of vedic oral tradition. As Manu has said:-

*vedamevābhyasennityaṁ yathākālamatandritaḥ /
tāṁ hyasyāhuḥ paraṁ dharmamupadharmo 'nya ucyate //*

(Manu-IV.147)

which means, the main duty is to recite and practise vedic chantings untiringly as it is the main duty.

The reward of correct reading of veda is suggested in the *AV* as follows:-

*stutā mayā vardā vedamātā /
pracodayantāṁ pāvamānī dvijānām //*
*āyuh prāṇaṁ prajāṁ kīrtiṁ draviṇaṁ brahmavarcasam /
mahyaṁ dattvā brajata brahmalokam //* (AV XIX.71.1)

The basic rules for the vedic recitations specially for the white *yajurveda* may be summerised here as follows:-

For the Vedic recitation one should be of humble attitude and pleasant mind and by fixing the eyes on the posture of hand (as shown in the picture: No.-1)

One should sit on a seat which is pure with a *padmāsana* or *svastikāsana*. Then he should keep his right hand on the fist of the left hand, and by arranging the fingers in the *gokarṇākṛti*, one should chant the *mantras*.⁴



(Picture-1)

4. *suprasannamanā bhūtvā vinītaḥ svāsanaṁ bhajet /
niveśya drṣṭiṁ hastāgre vedaṁ svīyaṁ samabhyaset //*
*hastau susamīyatau dhāryau jāmunorupari sthitau /
guroranumatiṁ kuryāt paṭhamānya matir bhavet //*
*āsanaṁ svastikaṁ padmaṁ boddhorou dakṣiṇe karam /
savyaṁ samuṣṭi vinyasya muṣṭau dakṣiṇakārparam //* Sampradāyaprabodhinīśikṣā, verses-6-8

During the chanting of *vedamantras* one should not be very quick or very slow, should be of calm disposition, one should utter the mantras with a balanced tone free from high or low pitch defects.

Before starting the *mantrapāṭha*, one should utter “*hariḥ om*”, which is *ādyudātta*, *svaritānta* as: *hariḥ* | *ōm* |

IV. Hand movements during vedic recitation

In the *Mādhyandina* recession of *ŚYV*, the accent variations are indicated by hand movements. The utterance of accents like *udātta*, *anudātta* and *svarita* etc. and the hand movements should coincide with each other, because it has been stated:-

yatra yatra sthitā vāṇī pāṇīstatraiva tiṣṭhati /

hastabhraṣṭaḥ svarād bhraṣṭo na vedaphalamaśnute // Yāj. śik.-24

The hand-accent method has much significance as without such knowledge, the actual reward of *vedapāṭha* is not possible. Thus it is stated:-

ṛco yajūṁṣi sāmāni hastahīnāni yaḥ paṭhet /

anṛco brāhmaṇastāvad yāvat svāraṁ na vindati //

Without the knowledge of *svara*, if one shows the hand movement while reciting the *mantras* then he incurs sin. Thus it is stated:-

hastahīnaṁ tu yo 'dhīte svaravarṇa-vivarjitam /

ṛgyajuḥ sāmabhirdagdho viyonimadhigacchati // Yāj. śik.-40

During the utterance of *udātta* accent, the hand is to be raised up to the head, during the utterance of *svarita* accent the hand is to be raised up to the tip of the nose and during the utterance of *anudātta* accent, the

hand is to be raised up to the heart.

V. Summaries of rules for vedic recitation of ŚYV.

1. *anusvāra* has two divisions

- where there is the 'ॐ' sign there one should know that the *anusvāra* is short and of one mora.
- If after the above sign, a conjunct letter comes, then one should understand that there the *anusvāra* is long.
- In certain places, the long *anusvāra* is indicated by the sign 'ॐ'

In all the above cases, the *anusvāra* is to be uttered as 'gum'

2. *visarga* is to be pronounced as *hakāra* but it is not to be regarded as *hakāra*.

For example:-

देवो वः / सविता *visarga* in *vaḥ* is to be uttered as *ha*.

देवीः *visarga* in *vīḥ* is to be uttered as *hī*.

आखुस्ते पशुः *visarga* in *śuḥ* is to be uttered as *hu*.

अग्नेः *visarga* in *gneḥ* is to be uttered as *he*.

बाह्वोः *visarga* in *hvoḥ* is to be uttered as *ho*.

स्वैः *visarga* is to be uttered as *hi*.

द्यौः *visarga* is to be uttered as *hu*.

3. *raṅga* or the half *anusvāra* has two varieties as: शब्रूँ १॥ लोकाँ २॥ (In these cases short and long *raṅga* is to be uttered as per the previous vowel.

4. where there is the sign 'ऽ' between two vowels, there it is to

be understood as one mora hiatus.

5. where there is a stroke in the middle of 'य', it is to be understood as *jakāra*.
6. if *ra* comes after *śa*, *ṣa*, *sa* or *ha*, it is to be understood as 're'
7. The 'ष' if not joined with *ta*, *tha*, *da*, *dha* or *na* is to be uttered as 'ख' (*kha*).
8. The letter 'ज्ञ' is to be pronounced as ज्ञ् (ज्ञ). In Maharashtra, the vedapāthīns utter it as 'gnya' 'ग्न्य'.
9. The various signs prescribed for different accents are as follows:

udātta- The *udātta* accent has no sign as in अमिः

svarita- The *svarita* accent is indicated by a vertical straight line over the letter अ as in अमिमीळे

anudātta- The *anudātta* accent is indicated by a horizontal line below the letter अ as in अमिम्.

anusvāra (short) - ँ

anusvāra (long) - ञ

visarga before an *udātta* - ÷

visarga before an *anudātta* - ⊥

svarita in the middle - L or ४

half *nyubja* or full *nyubja* - ω

10. The hand movements as per the accents

i) *udātta* has two principal divisions as *ūrdhvagāmī* and *vāmagāmī*

a) If *udātta* is there before the *svarita*, then the hand is to be raised.

For example- “आहमेजानि” (ŚYV.XXIII.19)

b) If *udātta* comes before the *svarita* with *nyubja* sign and the *svarita* with the sign of a vertical line then the hand should be raised upward while uttering the *udātta*.

For example- “बृहत्युष्णिहा” (ŚYV.XXIII.33)

The second category of *udātta* has three subdivisions as

a) *udātta* coming in between two *anudāttas*. In this case, the hand is to be turned to the left of the reciter.

For example- “गायत्री त्रिष्टुब्ज” (ŚYV.XXIII.33)

b) If *udātta* is there at the end of the *mantra* and after the *anudātta* and the next *mantra* starts with an *anudātta* letter, then the hand should move towards the left of the reciter.

For example- “गर्भधम्” (ŚYV.XXIII.19)

c) If *udātta* is at the beginning of a *mantra* followed by an *anudātta* vowel, then the right hand should move towards the left as shown in the picture-3.



(Picture-2)



(Picture-3)

For example:- “य ए॒ताव॑न्तश्च” (ŚYV.XVI.63)

In this way there are two types of raised (*ūrdhvagāmī*) and three types of left turn (*vāmagāmī*) *udātta* accents.

ii) *anudātta* has five varieties as follows:-

- | | |
|---------------------|-----------------------|
| a) <i>nimnagāmī</i> | b) <i>antyadarśī</i> |
| c) <i>dakṣagāmī</i> | d) <i>tiryagdarśī</i> |
| e) <i>antargāmī</i> | |

a) *nimnagāmī anudātta*- When *anudātta* comes first, then *udātta* and then *svarita*, the *anudātta* is to be known as *nimnagāmī* and the hand is to go downwards as shown in picture No.4.

For example:- “गु॒णानो॑न्त्वा” (ŚYV.XXIII.19)

b) *antyadarśī anudātta*- It occurs when a series of *anudātta* are together. In this series the last *anudātta* letter is to be uttered with the low position of the hand as in picture No.4.

For example- “ब्र॒ह्मवि॑ज्ञाय॒ स्थवि॑रः” (ŚYV.XVII.37)

c) *dakṣagāmī anudātta*- When accents are in the order of *anudātta*, *udātta* and *anudātta* then the first *anudātta* is to be uttered with the movement of right hand to the right side as shown in the picture. No.5.

For example- “प्र॒ङ्क्त्वा॑ स॒ह” (ŚYV.XXIII.33)



(Picture-4)



(Picture-5)

d) *the antargāmī anudātta*- The letter under which ‘४’ or ‘L’ sign is given is known as *madhyāvarṭti svāra* and an *anudātta* accent coming just before such *madhyāvarṭti svāra* when uttered, the hand is to move towards the belly as shown in picture no.6.

For example- “च॒ व्यु॒त्प॒क्षे॒शाय॑” (ŚYV.XVI.29)



(Picture-6)

e) *tiryagdarśī anudātta*- If the sign of *nyubja* (ω) comes after *anudātta*, then the hand is to be moved towards the right in the position of offering oblations to the manes (*piṇḍadāna*) as in picture no.7.

For example- “बृ॒ह॒त्यु॒ष्णि॒हा” (Rudrī 1/2)

iii) Divisions of *svārita*

The *svārita* accent has the following five varieties.

- madhyapātī svāritaḥ*
- madhyadarśī svāritaḥ*
- madhyāvarṭi svāritaḥ*
- pūrṇanyubjasvāritaḥ*
- ardhanyubjasvāritaḥ*

a) *madhyapātī svārita*- When the sign of *svārita* is a vertical straight line above the letter, in that case the hand is to be placed at the middle in front of the heart as shown in picture no.8.

For example- “गु॒णाना॑त्वा” (ŚYV.XXIII.19)



(Picture-7)



(Picture-8)

- b) **madhyadarśī svarita**- The unmarked letters coming after *svarita* are known as *pracaya* and the handgesture is to be shown as in *svarita* accent as shown in picture no.8.

For example- “गुणपतिं हवामहे” (ŚYV.XXIII.19)

- c) **madhyāvarṭisvarita**- The sign of ‘L’ or ‘४’ if given under a letter in a word before which an *anudāṭṭa* letter is there, then it is called *madhyāvarṭisvarita*. In such cases the right hand is to be placed in front of the chest and is to turn towards inside during the utterance of the *anudāṭṭa* letter, which precedes and during the utterance of the *madhyāvarṭisvarita* letter, the hand is to come outside after making a full turn.

For example- “च व्युप्तकेशाय” (ŚYV.XVI-29)

- d) **pūrṇanyubjasvarita**- The sign of *pūrṇanyubjasvarita* is “ω”. If such sign is there under a letter which is preceded by letters of *anudāṭṭa svara* and followed by an unmarked letter which is further followed by *madhyapātī svarita* marked letter ‘⊥’, then the palm is to move downwards while uttering the *nyubja svarita* as shown in picture no.9.



(Picture-9)

For example- “बृहत्पुष्णिहा” (ŚYV.XXIII.33)

- e) **ardhanyubjasvarita**- (sign ω)- If the letter with ‘ω’ sign comes after the *anudāṭṭa* letter and followed by the *udāṭṭa* after which an *anudāṭṭa* comes, then during the utterance of *nyubja* signed letter, the hand is to turn towards the right with the palm upwards as shown in picture no.10.

For example- “रुद्रो न रुमीन्” (Rudrī 1/4)



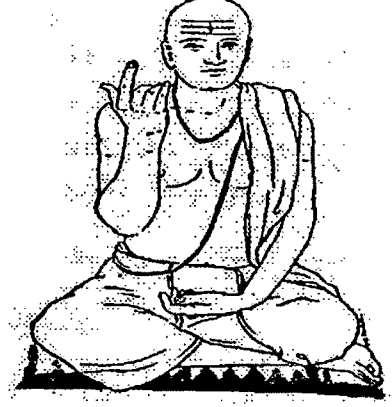
(Picture-10)

11. The hand gestures during the utterance of *visarga*

There are three signs for *visarga* :

i) If *visarga* is in a letter with *urdhvagāmyudātta* then in that case, the index finger is to be turned upside as in picture no.11.

For example- “आशुः शिशो॑नो” (ŚYV.XVII.33)



(Picture-11)

and if that *visarga* comes after the *vāmagāmyudātta*, then the hand is to be placed towards the left with the raising of the index finger as shown in picture no.12.

For example- “स॒हस्रा॑क्षः” (ŚYV.XXXI.1)



(Picture-12)

ii) Where there is a horizontal line in the middle of the *visarga* as shown in the example, then the little finger and the index finger are to be kept straight and the middle and ring-finger are to move towards the hand as shown in picture no.13.

For example- “सू॒ची॒भिः ÷ ” (Rudrī 1/2)



(Picture-13)

iii) When the middle line of *visarga* is turned downwards then the little finger is to be turned down as shown in picture no.14.

For example- “पुरुषः” (ŚYV.XXXI.2)



(Picture-14)

12. The hand-postures during the utterance of *anusvāra*

i) Where the *anusvāra* is represented through ‘ॡ’ sign, there *anusvāra* is short or of one mora only. During the utterance of such *anusvāra*, the fingers are to be joined together as shown in the picture no.15.

For example- “छन्दाॡसि” (ŚYV.XXXI.7)



(Picture-15)

ii) The *anusvāra* which is marked by ‘ँ’ is to be represented by stretching the index finger towards the front as shown in picture no.16.

For example- “सु भूमि ँ” (ŚYV.XXXI.1)



(Picture-16)

13. The hand-postures during the utterance of end-consonants in a *mantra* or *mantrārdha*

i) If the consonants *k*, *ṭ*, *ṇ*, *ṇ*- come at the end of a half *mantra* or a *mantra* or at the end of a *pada* during *padapāṭha*, then they are to be represented by making the index finger low as shown in picture no.17.



(Picture-17)

For example in the *padapāṭha*- “भिषक्, सम्राट्, प्राङ्, वृषण्” etc.

ii) If at the end, the consonant “*t*” comes, then the index finger is to be attached to other fingers in round shape as shown in picture no.18.



(Picture-18)

For example- “सुहस्रपात्” (*ŚYV.XXXI.1*)

iii) If the consonant ‘*n*’ comes at the end, then the tip of the index finger should touch the tip of the thumb as shown in picture no.19.



(Picture-19)

For example- “रश्मीन्” (*Rudrī 1/4*)

iv) If the consonant ‘*m*’ comes at the end, then it is to be shown by making a fist as shown in picture no.20.

For example- “गर्भधम्” (*ŚYV.XXIII.19*)



(Picture-20)

v) if the consonant 'p' comes at the end, then the five fingers are to be joined together as shown in picture no.21.

For example- “ककुप्” in the *padapāṭha*

14. The faulty hand-postures

Sometimes it is found that the *padapāṭhins* show the faulty hand-movements which do not yield the desired result. As it is stated-

*culurnaukā sphuṭo daṇḍaḥ svastiko muṣṭikākṛtiḥ /
paraśurhastadoṣāḥ syustathāṅgulyā pradarsanam //*

(*Sampradāya prabodhinī śikṣā* -34, or *Yāj.śik*-38)

The followings are the faulty hand-postures-

i) *culu cullū*- which is the *ācamana* posture as shown in the picture.



हस्तदोषः १ - चुलु

ii) *naukā*- the hand in the shape of a boat as shown in the picture.



हस्तदोषः २ - नौका

iii) *sphuṭa*- the palm in the straight position as shown in the picture.



हस्तदोष ३ - स्फुट

iv) *daṇḍa*- the hand in the shape of slapping as shown in the picture.



हस्तदोषः ४ - दण्ड

v) *svastika*- the posture of the hand expressing *abhaya* or repelling fear as shown in the picture.



in

हस्तदोषः ५ - स्वस्तिक

vi) *muṣṭika*- the palm contracted to the form of a fist as shown in the picture.



हस्तदोषः ६ - मुष्टिक

vii) *paraśu*- the articulation of fingers in the shape of a *paraśu* or an axe as shown in the picture.



हस्तदोषः ७ - परशु

viii) *tarjana*- showing the accents by the index finger as shown in the picture.



हस्तदोषः ८ - तर्जन

The above eight postures are declared as faulty hand postures, the traditional hand postures.

In fact for Vedic recitations the traditional trained teachers are to be consulted. If a student with all sincerity learns the recitation from proper teachers, then through proper recitation he can realise Brahman, the Supreme Entity. Thus it may be concluded that *uccāraṇe vastutastu sadguruḥ śaraṇaṁ matam*.

Selected Bibliography

I. PRIMARY SOURCES

- Atharvaveda saṁhitā* Nag Prakashak, 11A/U.A. Jawahar Nagar, Delhi-110007 (India), 2nd Ed., 1997.
- Atharvaveda-saṁhitā* Pt. Satbalekarsvādhyaya Maṇḍala, 1940
- Aṣṭavikṛtikārikāvyaṅhya* Saraswati Bhawan Pustakalaya, Varnaseya Saṁskṛta Visvavidyalaya, Varanasi
- Āpiśaliśikṣā* Yudhiṣṭhīramīmāṁsaka, Ajamer, 1967
- Āraṇyaśikṣā* Śrīraṅgam, 1967
- Ṛgveda saṁhitā* Nag Prakashak, 11A/U.A. Jawahar Nagar, Delhi-110007 (India), 2nd Ed., 1997.
- Ṛgvidhānam* Nirnayasagar Press, Bombay
- Kāṇva-saṁhitā* Pt. Sātvalekarsvādhyāya Maṇḍala, 1988
- Kāṇvasaṁhitā Sāyaṇa-bhāṣyam* Chawkhamba Sanskrit Series, Varanaśi, 1962
- Taittirīya-saṁhitā* Pt. Sātvalekarsvādhyāya Maṇḍala, 1945
- Taittirīya-prātiśākhya* (tribhāṣyaratna-ṭikā) Government Press, Mahisur, 1906
- Taittirīya Prātiśākhya* Bibliotheca Indica, Calcutta
- Niruktam* Ānandāśrama, Poona, 1927
- Nārādīya śikṣā* Kaundinnyāyana, edited by, Chowkhamba Vidyabhavan, Sivaraj Acarya, Varanasi, rev. ed. 2002.
- Niruktam of Yaska and Exhaustive Notes with the Niruktavritti (critically edited by) Mukund Jha Bakshi, Panini, Ansari Road, Daryaganj, New Delhi-110002

<i>Pāṇinīya-śabdānu-śāsanam</i>	Edited by Satyānandavedavāgīśa, 272, Aryanagar, Albar, 1st edn. 1987.
<i>Pāṇinīyaśikṣā</i>	Critically edited by Manomohon Ghosh, University of Calcutta, 1938.
<i>Bṛhaddevatā</i>	Asiatic Society, Calcutta, 1893
<i>Vājasaneyi-mādhyandina śuklayajurveda-samhita</i>	Edited by Pandit Jagadishlal Shastri, Motilal Banarasidass, Delhi, Reprint, 1987.
<i>Vaidika Sāhitya aur Saṁskṛti</i>	Pt. Baladeva Upadhyaya, 1967
<i>Vaidikasvarasamīkṣā</i>	Ṛṣikula-vidyāpīṭha, Haridwara, 1974
<i>Vyāḍīśikṣā</i>	Sanskrit Vidyapitha, Mahisur, 1967
<i>Vājasaneyiprātiśākhya</i>	Venkatesa Serma, Madras, 1934
<i>Śikṣāsamgraha</i>	Edited by Acarya Sri Rama Prasad Tripathi, Sampurnananda Sanskrit University, Varanasi, 1st ed. 1989.
<i>Śrī śuklayajurvede vājasaneyisaṁhitā</i>	Edited by A. Weber, Chowkhamba Sanskrit Series Office, Varanasi-1, 2nd Edition, 1972.
<i>Śuklayajurvedīya-samhitā</i>	Pt. Satbalekarsvadhyaya Mandala, 1984
<i>Śatapathabrāhmaṇa-sāyaṇabhāṣyam</i>	According to the Mādhyandina Recension with the <i>vedarthaprakāśa bhāṣya</i> of Sāyaṇācārya supplemented by the commentary of Harisvamin, Vols.- I-V, Jnanpublishing house, Shaktinagar, Delhi, 110007, Reprint-1987.
<i>Śikṣāprakāśaḥ</i>	Varanasi, 1883
<i>Śikṣāsamgraha</i>	Pt. Sri Yugal Kishor Vyasa, 1883, Kashi
<i>Śaunakaśikṣā</i>	Guruvayur, Keral, 1962
<i>Śuklayajurvedīyavāja-saneyiprātiśākhya</i>	Dr. Virendra Kumar Varma, Varanasi

<i>Sāmaprātiśākhya</i>	Chawkhamba Sanskrit Series, Varanasi, 1922
<i>Yajurveda saṁhitā</i>	Nag Prakashak, 11A/U.A. Jawahar Nagar, Delhi-110007 (India), 2nd Ed., 1997.
<i>Yājñavalkyaśmṛtiḥ</i>	Anandashrama, Poona, 1903
<i>Yājñavalkyaśikṣā</i>	Sri Visvanatha Sarma Vidyapitha, Haridwara, 1973
Yaska's Niruktam	With Sanskrit and Hindi commentaries : Meharchand Lachmandas Publications, Ansari Road, Dariyaganj, New Delhi-110002, 2nd Edition, 1985.

II. SECONDARY SOURCES

Allen, William Sidney	<i>Phonetics in Ancient India</i> , Oxford University Press, London, Reprint 1963
Burnell, A.C.	<i>On the Aindra School of Sanskrit Grammarians, their place in Sanskrit and subordinate literatures</i> , Mangalore : Basel Mission Book and Traet Dipository, 1875.
Cardona, George	<i>Pāṇini, A Survey of Research</i> , Motilal Banarsidass, Delhi, 1980.
Chaturvedi, Ramamurti	<i>Vaidikaśikṣā svarūpa vimarśaḥ</i> , Sampurnananda Sanskrit University, Varanasi, 1st Edition, 2003.
Gold Stucker, Theoder	<i>Pāṇini : His place in Sanskrit Literature</i> , edited by S.N. Shastri, Chowkhamba Sanskrit Series office, Varanasi-1, 1st Indian Edition 1965.

- Joshi, S.D & Roodbergen, J.A.F. *Patañjali's Vyākaraṇa Mahābhāṣya Paspasāhnika*, Poona University Press, Pune-411007, 1st Ed. June 1986.
- Mishra, Sri Gopala Chandra *Sampradāyaprabodhini śikṣā*, Chawkhamba Vidyabhavan, Varanasi.
- Max Müller, F. *A History of Ancient Sanskrit Literature*, edited by S.N. Shastri, Chowkhamba Sanskrit Series Office, Varanasi-1, 1968.
- Sastri, Mangaladeva *Rgvedaprātiśākhya* Vanarasa Press, 1983.
- Singh, Umesh Prasad *Śukla-yajurvedaprātiśākhya eka pariśilana*, Kala Prakashana, B 33/33 A-1, New Saketa Colony, BHU, Varanasi-221005, 1st ed. 1999.
- Satapathy, Ladukeshwara *Samskṛtavarnasvarūpam samutpattiśca* ed. by Smt. V.P. Satapathy, Ghodabazar, Puri (Orissa) 752002, 1st ed. 1980.
- Satapathy, Ladukeshwara *Varṇaparivartana-rahasyanirūpaṇam (Varṇavijñānam ityasya dvitīyo bhāgaḥ)* pub. by Smt. B.P. Satapathy, Ghodabazar, Puri (Orissa), 752002, 1st ed. 1992.
- Sastri, P.S. Subrahmanya *Lectures on Patañjali's Mahābhāṣya*, Vol.-I (Ahnika 1-3), 12, North Madavilagam, Thiruvaiyaru, P.O., South India, 1943.
- Srivastav Anand Kumar *Taittirīya Prātiśākhya eka pariśilana*, Vani Mandir, Nai Sarak, Varanasi, 1st ed. Dec. 1996.
- Sarup Lakshman *The Nighantu and the Nirukta*, Motilāl Banarsidass, Bungalow Road, Delhi-110007, 1st pub., 1920-27, MLBD reprint, 1967, 1984.

- Tripathi, Ramdev *Bhāṣāvijñān kī Bhāratīyaparamparā aur Pāṇini*, Bihar Rastrabhasa Parisad, Patna-800004, 1st Edn., 1977.
- Thibaut, G *Das Jaṭāpaṭala*, Leipzig, 1870.
- Verma, Virendra Kumar *Ṛgveda-prātiśākhya of Saunaka along with Uvaṭabhāṣya*, Chowkhamba, Delhi, 3rd ed. 1986.
- Verma, Siddheswar *Critical Studies in the Phonetic Observations of Indian Grammarians*, Munsiri Ram Manoharlal, Delhi, 1st ed. 1961.
- Vyāsaśikṣā* Edited by P.N. Pattabhira Sastri, Chaukhamba Sanskrit Sansthan, Gopal-Mandir Lane, Varanasi-221001, 2nd ed. 2004
- Verma, Virendra Kumar *Śukla-yajurveda prātiśākhyaṃ or Vājasaneyiprātiśākhyaṃ*, Chawkhamba Sanskrit Pratisthan, Delhi-110007, Reprint 2001.
- Vasu, Sri Chandra *The Aṣṭādhyāyī*, Panini, edited and translated into English, 2 Vols, Reprint : Motilal Banarsidass, 1962
- Winternitz, M. *A History of Indian Literature* (Translation by V. Srinivasa Sarma), Vol.-I, Motilal Banarsidass, 41-U.A, Bungalow Road, Delhi-110007, 1st ed. 1981.
- Yati Madhusudana *Aṣṭavikṛtivyūtti*, ed. by Madhava Das Sankhya Tirtha, Calcutta, 1939.
- Yadhisthira Mimamsaka *Samskṛta vyākaraṇa-śāstra ka itihāsa (tin bhago men pūrṇa)* Sonipat : Rama Lal Kapur trust, Samvat 2030 (in Hindi) 1973.

III. JOURNALS

- Agrawal, Uma "Śuklayajurvedīyaśikṣāomen ucāraṇa vaiśiṣṭya", *Āmbhṛṇīyam*, Acharya Ramesh Chandra Shukla Felicitation Volume, Editor Satya Prakash Sharma, Aligarh, 1st Edition, Nov. 1983.
- Gupta, Sudhir Kumar "Authorship of the phonetic sutras edited by Dayānanda", *Poona Orientalist*-16, 1951
- Kielhorn, Lorenz Franz "Remarks on the śikṣās", *Indian Antiquary*-5, Reprint-1969.
- Liebich, Bruno "Das Datum der Candragomin" *wiener zeitschrift fur die kunde des Morgenlandes*-13, Bombay, Wien, 1899.
- Rastogi Motilal "Śaunakīyavarṇocāraṇadoṣanirūpaṇam" *Āmbhṛṇīyam*, Acharya Ramesh Chandra Shukla Felicitation Volume, Editor Satya Prakash Sharma, Aligarh, 1st edition, Nov. 1983.
- Rath, Prativa Manjari "Prerequisite qualifications for vedic studies : A Desideratum for vedic research" presented in 42nd All India Oriental Conference, 2004 at Sumpurnananda Sanskrit University, Varanasi (Summaries of papers, p. 104)
- Whitney, William Dwight "The Atharvaveda prātiśākhya or Śaunakīya caturādhyāyikā" text, translation and notes journal of the American Oriental Society, New Haven-7, (Chowkhamba, Varanasi, 1962).